

Cables *and* Wireless

GEORGE ABEL SCHREINER

Introduction by

EDWARD F. McSWEENEY, LL. D.

KNIGHTS OF COLUMBUS HISTORICAL COMMISSION

Property of
BUSSEY RESEARCH LABORATORY
232 EAST ERIE STREET - CHICAGO 11

Section

K

No.

7

Shelf

2A

Price

HAROLD ANDERSEN LIBRARY

Wisconsin State University
WHITEWATER

A GIFT FROM

Thomas Gibbs

CABLES AND WIRELESS

*and Their Rôle in the Foreign Relations
of the United States*

By

GEORGE ABEL SCHREINER

Author of: *The Iron Ration, From Berlin to Bagdad, The Craft
Sinister*, etc.; co-author with B. de Siebert of
Entente Diplomacy and the World.

Introduction by

EDWARD F. McSWEENEY, LL. D.

HE
7700
S3



1924

THE STRATFORD CO., *Publishers*
BOSTON, MASSACHUSETTS

145821

Copyright, 1924
By THE KNIGHTS OF COLUMBUS

Printed in the United States of America

AUTHOR'S NOTE

I am indebted to a number of persons for help given me in connection with this paper, among them Rear Admiral William S. Benson, U. S. Navy, retired, member of the United States Shipping Board; Rear Admiral Henry J. Ziegemeier, U. S. Navy, Chief of the Communication Division, Office of Operations, U. S. Navy Department, and Commander S. C. Hooper, U. S. Navy, in charge of wireless telegraphy in the navy. I owe thanks also to several officials of American cable companies.

All statistical data herein presented is from *Nomenclature Des Câbles Formant Le Réseau Sous-Marin Du Globe*, the official publication on that subject of the International Bureau of the Telegraphic Union, Berne, Switzerland. Most of the data throwing light on the submarine cable policy of the United States government is taken from a document entitled: "Cable-Landing Licenses, Hearings, 1921," printed by the United States Senate for its committee on Interstate Commerce, which was in charge of the investigation of which the document is the result. Acknowledgment is made also to a number of British and American publications on cables, electricity and commerce. The part of the book dealing with press matters and international relations is culled from my own experience as general and war correspondent for many years of American news services and newspapers.

SCHREINER.

January, 1924.

TABLE OF CONTENTS

Chapter		Page
	Introduction	I
I	The Means of International Inter- course	11
II	The Cable Policy of the United States	39
III	Cable-Landing Licenses and Monop- olies of Traffic	76
IV	Cable Relations Between the United States and Great Britain	108
V	The Radio in International Communi- cation	139
VI	The Press and International Commu- nication	158
VII	Summary	190
	Postscript	215
	Appendix	
	A Cables under Government Adminis- tration	229
	B Cables operated by Private Corpora- tions	237
	C Cables operated by Commercial Cable Companies in the United States	240
	D Foreign Commercial Cables Corpora- tions	245
	E Cables owned and operated by Euro- pean Governments and Corpora- tions	258
	F List of Subsidies Granted Foreign Cable Companies by their Gov- ernments	260
	G Cable Laying and Repairing Vessels	263

INTRODUCTION

As outlined in its original program, a series of historical studies was designed by the Knights of Columbus to promote American solidarity and to exalt the American ideal. These studies were divided into "origins," "achievements," and "problems." Under the first two, "Jay's Treaty," by Professor Bemis, the "Monroe Doctrine," by Thomas H. Mahony, and the "American States," by Allan Nevins, with others to follow, present important events in the history of the United States. Under "problems" it has been found necessary to consider the important economic problems on which the future successful progress of the nation is to a large degree dependent.

It is not to be disputed that under present conditions the United States is producing, conservatively stated, in less than nine months of each year, all that the people of the United States can consume in the full twelve months, which means, that unless some way is found to dispose of the surplus product in the open markets of the world, under free competition, certain consequences are inevitable, of which the train of evils following unemployment, is not the most serious.

The first consideration is the agency to transport this surplus product, and this is discussed by Admiral Benson in "The Merchant Marine." After this comes the question of the available world's markets, and "The Open Door" by Professor Bau, is a study of the political and diplomatic obstacles which limit trade with more than

one-half of the population of the world, living in what was formerly called the "Far East," but which actually is, for the United States, the "Near West."

The right of all the nations of the world freely to communicate with the rest of the world is essentially necessary to real world peace, and hence this book, "Cables and Wireless," by George Abel Schreiner, is the necessary sequel to "The Merchant Marine" and "The Open Door." The cause of free speech is the cause of man. Truth is born of open discussion. Every censor is, consciously or unconsciously, the enemy of humanity. A beneficial censorship is a contradiction in terms.

This book is a study of international policy regarding the laying and operation of submarine telegraph lines, or cables, and the present status of international communication, of which cables, and more recently the wireless system of telegraphy, have become the dominant factors. In this age of speed, the letter has been left far behind. Stock exchange and press function almost on the minute; the merchant can no longer afford to use the mails. Teleelectric communication is largely depended upon by all, especially by governments and their diplomatic representatives in foreign countries.

The international aspect of mails and postal regulations, however, is of great importance, and further agreements for the better protection of mails are urgently needed. During the World War powerful governments did as they pleased with neutral mails and in so doing deprived the public of the United States of the means freely to inform themselves of the facts as they would have been informed over cables controlled by their own government. Naturally, it would be expecting too much of any government not to place its enemy at as great a

disadvantage as possible. Indeed, he who expects governments not to do this, must be wholly blind as to what war is; but it should not be overlooked that neutrals have had and still have rights.

The phenomenon known as war can be curbed, or at least limited in recurrence, by better understanding among the nations of the earth. Full understanding is essential to knowledge. Man can know only what comes to his attention; as long as he is uninformed, or because he is misinformed, he cannot know, and of these two states the former is by far the less dangerous. To be misinformed means that man fancies he knows what he does not know — taking as truth that which has been presented to him, for the sole purpose of enlisting, first his sympathy and later his help, in whatever undertaking has been assigned to him by the agency controlling international communication.

For several decades the attitude of the United States Government towards cables was the result of the fact that this country needed all of its ready cash for internal economic development. Little money was available for the laying of cables. American capital was not eager to invest huge sums in enterprises full of as much risk as was the cable company's business. The result was that the cable business was well in foreign control before the United States gave the international aspect of this new phase of communication much attention. Though an American citizen was prominently connected with the laying of the first trans-Atlantic cable, the money he needed came from England, with the natural and inevitable result that the cable business was considered the monopoly right of those who took the risk. The further fact that there were large initial failures, made the Amer-

ican investor little more than an interested spectator. Each successive failure confirmed the opinion that the cable business could not be made financially profitable. When finally success was achieved, due to their courage and far-sightedness, the British cable companies were well entrenched. Cables that were to be laid had to be manufactured in England, and usually it was a British cable-laying vessel that paid out the cable.

The French Government was one of the first to recognize the value of this new means of international communication. It encouraged cable companies on the one hand, while on the other it saw to it that French companies surrendered as little as possible of national sovereignty of the cable end on the French shore. Out of this grew difficulties with the government of the United States, which are described in this book. It was in connection with the landing of French cables on American territory that the cable policy of the United States was formed and promulgated.

The electric impulse transmitting the cable message is much weakened as it travels over the many miles of copper wire that serve as its conductor through the oceans. The inertia of a great metallic mass has to be overcome and from this arises the necessity, so far as the so-called Atlantic cables are concerned, of relaying cable messages at certain distances — at such points as the shores of Nova Scotia, Newfoundland, Prince Edward's Island, Miquelon, the Azores, Ireland and England. This replenishing of the current, or relaying of the message, may be done by mechanical or manual repetition of the message into the stretch of cable to which new current is admitted. The government having jurisdiction over the shore on which cable relay stations are located, naturally

exercises its right of sovereignty; first, as to the conditions under which a cable landing license may be procured; second, as to what is best for its own public and commercial interest, especially in times of stress or war. It follows, then, that it is not ownership of the cable itself primarily, but international understanding, that determines the nature of service given by the cable. At the cable landing station on the shores of the United States messages will arrive normally and be delivered satisfactorily in times of peace, but this is not the case in times of international crises and war.

"Direct cable connection" between the United States and some other country is a term likely to be most misleading. In the most favorable circumstances, only the cable-end on the American shore is under the absolute control of the United States government or its people. The cable-end in the foreign country cannot be under American control without the fiction of ex-territoriality being set up, and to such a claim no strong government will consent. This results in the cable-end in the foreign country being as much under the control of a foreign government as the cable-end in the United States is under the control of the American government. The status of international cables is, therefore, peculiarly a matter of reciprocity, and as such, it has become a problem of great dimensions, of vital importance, and grave aspect.

It is not the physical ownership of cables that is everything in this matter; the control of the messages transmitted over cables is much more important. Cable companies have realized this and in their endeavor to serve the public well, have done everything possible in recent years to obtain from foreign governments certain privileges which would at least in times of peace ensure "cable

secrecy." In some foreign countries the American cable companies have been measurably successful; in others they have failed. The privileges in question consist in the main of obtaining the consent to operate cable-receiving offices in the larger population centers and to connect these offices by leased land wires with the cable-end on the shore.

There is some slight reason to hope that before long, governments everywhere will give a little more sympathetic attention to this phase of the international cable business. With foreign cable companies entitled to maintain offices wherever they deem them necessary, and able to lease land-lines, the cause of international understanding and goodwill will have been appreciably advanced. The next step would be to link all countries with cables; but of far greater importance is the status of cable relay points.

It has already been indicated that in times of peace, normally, there is little to complain of in relation to the management of cables and their business. When a crisis arises, long before war is declared and cables are cut, or put under a state that is the outcome of martial law, there is the war-incubation period.

The propagandist, never wholly asleep, comes to the front and begins his work, generally by attempts at poisoning the mind of the public he hopes to have on his side when war breaks out. From that moment the cable relay point becomes of the greatest importance. Though we are told that cable secrecy continues even then, we have little reason to believe that this is so—much more, in fact, we are certain that it is not so. The author of this book has been moderate on this point. This is not a matter of hearsay or assertion. The reader has but to consult the text of the landing licenses herein reproduced, to see how and why governments controlling cable-relay

points ensure to themselves inspection of the messages transmitted.

The governmental status of cable-relay points should therefore be improved. At such points as the Azores cable companies should be able to land, and from there relay messages without having to submit to the will of the agents of a government other than that under which the cable-owning company operates, by virtue of being incorporated or chartered by it. That is the very least that should be done, and were this matter given the consideration it merits, pressure of public opinion would induce governments to relinquish such hold as they have obtained on United States cable companies, by virtue of terms of cable-landing licenses.

Although it was shown conclusively during the years 1914-1920 what cable control meant, the question of cable communication has been given scant attention since the War. The international status of cables in times of peace as in days of war, is today what it was in 1914, the year in which cables serving neutrals were cut by anybody who pleased to do this; the year also, in which control of the cable business was assumed by whomsoever had the power so to do.

As a result of this highhandedness, the people of the United States suffered in prestige and commerce, but to those who knew the facts, even more in a certain loss of self respect. It may be true that the denial of the right to be fully informed could have been carried even much further than it was, but it may be well to bear in mind that the cards in the international stack are not always in the order they were during the war. The deal may turn out differently the next time, so that it would be well to look a little into the future. It is not expecting too much

of the American public that they will demand that foreign governments and their censors, foreign cable companies, and foreign news services, will grant them the right to inform themselves, rather than leave this to foreign mentors, who, despite all protestations to that effect, cannot possibly have all, or always, the same interests that the United States has. But of these matters the reader will learn in the book itself.

I wish to add a word concerning the author of this book, Mr. George A. Schreiner. Since the War he has written a number of books, as well as a great number of articles, on international relations and affairs. I do not know of any other citizen of the United States who is better qualified to write on these subjects, or who has had more experience with cables and the purpose they serve. So high an authority as Dr. Ernest Lavisse, of the Sorbonne, has stated that the writings of Mr. Schreiner inspired him with confidence at a time when he took nearly all that was written with a liberal pinch of salt. Dr. Lavisse's preface to Mr. Schreiner's "*La Détresse Allemande*," is probably the most flattering comment ever made in regard to any book reviewed by this foremost of France's historical critics.

Mr. Schreiner, then, is well fitted to write this book. Coming to the United States from South Africa, at the conclusion of the Boer War, he entered the field of American newspaper work, filling, in the course of time, every post on the daily — including that of managing editor and editorial writer.

At the outbreak of the European war he was in Mexico as one of the war correspondents of the Associated Press of America, and from there was transferred to The Hague, Holland, to establish a relay bureau for the press

dispatches of that service — an undertaking which a reign of almost universal censorship necessitated. It was while in charge of this bureau that Mr. Schreiner first gave his attention to cables and their place in the international scheme. On an average four out of five Associated Press dispatches were suppressed by the censors, or so mutilated that they were of little value as news. As the war grew older, cabling conditions grew worse, and it was so everywhere. No matter how fair the news dispatches intended for the American press might be, no matter how neutral the American correspondents might remain, those in control of the cables permitted only such items to reach the United States as fitted into the promotion of their own interests. Obligated to cope with this condition for years, Mr. Schreiner realizes that the least the American public can do is to give the means of international communication — cables, wireless and mails alike — sufficient attention to fully protect the interests of the United States. Every American citizen wishes to see himself and his fellow-citizens less at the mercy of those who control his thinking by controlling the great highway of the news — the cables.

(Signed) EDWARD F. MCSWEENEY.

CABLES AND WIRELESS

CHAPTER I

THE MEANS OF INTERNATIONAL INTERCOURSE

The number of persons who realize how much their fate and fortune and the security of the state they live in may depend upon the quality of those means by which they are in contact with foreign aggregates is surprisingly small. The average individual takes much for granted in this respect. Among the things especially taken for granted is that cables and wireless systems are a sort of public utility that must serve all and serve them equally well. Due to the fact that now and then cable and wireless corporations have the opportunity of advertising widely that they are exceedingly punctilious in guarding the contents of messages given them for transmission—even against the demands of courts and governments—a wrong and misleading impression has gained ground in the general public.

It is indeed a fact that cable and wireless companies do their utmost to hold the messages transmitted by them inviolate. The company that would fail in this of its own accord would suffer severe losses. It is good business, then, to uphold the policy in question.

Corporations, however, are subject to governmental *force majeure*. The world war is not too far back to serve as a telling illustration. It was deemed necessary to establish what is known as censorship—the means to control, and suppress if necessary, whatever information a government thought detrimental to its own security or public interest. During the four years of the world war and the first year of peace censorship was universal. It was of two kinds. There was the open censorship of which the public knew, and there was secret censorship. The sort most familiar to the general public was that which was set up to keep military information from the ken of the enemy; the variety better known to the businessman aimed at destroying the foreign markets and foreign credits of the antagonist.

Though the world war assumed a very wide range as the weary years of strife passed on, military censorship proper never went far beyond its natural boundaries, even if in the course of time the term was stretched into any number of mean-

ings. It was different, however, with the censorship that aimed at keeping the enemy in check commercially and diplomatically—giving the latter its international political sense. The censorship applied with this in view was much more general than is commonly known. It extended to the farthest corners of the earth, and proved in the end the undoing of the Central Powers group of belligerents. Before the war was over more than a score of nations had either declared war upon the Central Powers or had taken the first step—severed diplomatic relations with them.

It took the means of international intercourse to bring this about. The cables were used, the wireless was used and the mail was used. There was not a single means of international intercourse over which the Central Powers could transmit to countries not in physical contact with them that which could serve to promote their interests as against the interests of the group then known as the Allied and Associated governments. The fact that the Netherlands, Switzerland and the three Scandinavian countries stayed out of the war is an illustration of this. In these countries, as to a lesser extent in Spain, the case was viewed differently than it was elsewhere. Public opinion there was the result of two hostile currents of so-called information meeting. In other words the

peoples of the countries named enjoyed the rather ideal position of being able to draw their own conclusions. They may have lacked in knowledge of actual fact, but to their attention was brought hourly by speedy means of communication that which one government said of the other, which usually consisted of precisely that which the other government did not want to have known.

The war made it plain that the international cables can not be protected against those in a position to cut them and keep them cut. It demonstrated also, though in a lesser degree, that the wireless system of telegraphy is not secure against interference—wiping-out by aerial electrical disturbance the messages that are sent. That all mail was censored should still be too well remembered to require attention here.

Thus it was shown that international intercourse, and its means, precarious as both are, need much more care than in the United States, for instance, they have been getting in the past. To have a bad reputation abroad is not necessarily the fault of those who suffer from it. To give another people and its government a bad reputation may have been recognized by a hostile government as the best means of gaining its end. The daily dose of slander if administered by experts is in the end less costly to him who administers

it than a war, or again this method of doing things may lead to having friends where none might be had without it.

The world war and its result have demonstrated how very necessary it is to have good foreign relations—to have others think well of one. Nor is this solely a question of good understanding among governments. Friendly relations between governments are usually the rule, even beyond the breaking point indicated by public opinion. Diplomatic intercourse is of necessity a matter of *politesse*—of courtesy even when there is no longer an occasion for it. It is different with public opinion and the press, or the press and public opinion, for in our days, as always it has been, perhaps, the press is not the mouthpiece of public opinion but the moulder thereof.

Of good relations among peoples, then, the status of the means of international communication is a most important factor. This applies especially, almost exclusively, to the rapid means of communication—the tel-electric facilities of which press and business makes so much use of today. The mail has no longer an important function in these departments. General news and financial news, the doings of statesmen and their masters—the modern captains of industry and commerce, as reported by telegraphic means can

no longer be overtaken, modified or corrected, by information conveyed by mail. The first impression has always counted, and always will count so long as the average human being is susceptible to prejudice. The news that is read is the dispatch in the frequent editions of the daily paper, not the serious, and often too scattering exposition of a subject in the more literary publications. World public opinion is made and remade by the hour almost; those who would engage in the perfectly futile endeavor of rescuing the milk that is spilt in the making-up of our lightning dailies may indeed become of interest to the historian—in the scheme of the actual, of life as it courses, they have unfortunately no longer a place. Their usefulness ended with the advent of the electric means of news transmission. That they have not yet generally realized it may be regrettable; that a part of the public still places value upon such effort is likely to prove fatal, because it may lead to a totally false conception of a situation or set of conditions.

Man everywhere today depends upon rapid means of communication. And this statement is not to be understood as an endorsement of the speed mania that reigns everywhere. But we deal here with a fact, without regard to the authors or objects of the hurry craze. Speed has become

a general condition. Those who fail to mind this do so at their peril. It is well, then, to see what the means of speed in international intercourse are, what they mean to us, who controls them, under what conditions we are permitted to use them, and in what respect the system in general could be improved.

The heliograph, an invention of the ancient Greeks, is the first means, so far as records show, of instantaneous transmission of messages. The contrivance is simple enough, consisting of a small mirror from which the light of the sun, or a lamp, is reflected. For military purposes the heliograph is still used in our own times, though the wireless will in the end displace it entirely.

There is no reliable evidence indicating that the Greeks and Romans used the heliograph for the transmission of commercial messages. Apparently it was used for military purposes only. It is mentioned specifically in connection with a naval battle won by the Greeks. On the other hand, the Greeks were too intelligent and enterprising a people not to have made use of this instrument in their system of inter-island communication. In fair weather the rays of a heliograph can be seen for great distances, and the same is true of the signal lamp in clear nights.

A little more is known about the Roman lines

of communication. The system was interior and intercolonial, and the oldest means used were the well-built Roman roads, on which mails, and in some cases passengers, were carried on light vehicles speeded by relays. Later, as the necessity of more rapid communication within the empire, for military and governmental purposes, became more pressing the famous Roman signal hills were added to the system. One sees their remains to-day, especially in Asia Minor. Where a natural eminence could not be used for the purpose, the Romans threw up an artificial hill, crowning it usually with a fortress, or a temple-fortress, such as Baalbec, established by Emperor Augustus. From a tower on the hill a heliograph was operated by day, and a signal lamp by night. Naturally, on sunless days and foggy nights, the system was useless, so that men on horseback had to relay the messages.

It has been seriously asserted—on what authority the writer does not know—that the Roman government was able to transmit over this system messages from Rome to Jerusalem in three days. It is known definitely that the system served the government solely.

Until the close of the Napoleonic era, the old world managed to get along with dispatch riders and the mail coach. Mails, however, had been

definitely routed by the middle of the eighteenth century, both on land and sea, while the inventing of printing from individual types had made the diffusion of news and knowledge among peoples much more general.

It was the steam engine and the telegraph that gave to international communication the form and political aspect it now has. For many years all mails were exchanged at frontiers. By virtue of agreements finally arrived at in international postal conventions foreign mails were routed through to destination regardless of national frontiers, so that in times of peace they are now permitted to pass without hindrance or the scrutiny of censorship. Thus postal matters stand today. The modifications made since then are of a technical rather than a general nature, and do not *per se* come within the purview of this writing, though the status of postal communication in times of war is to get passing attention further on.

Telegraphy, invented about 1837, consists in its technical aspect of sending over a strand of wire, and more recently through the air, an electrical impulse, interrupted at such lengths as are deemed practical. The oldest form of telegraphy is that on land, in which wires, copper in most cases, are strung on poles, and thus serve as conductors.

The sending and receiving apparatuses are exceedingly simple, consisting of nothing more than a means of admitting and interrupting the electrical current.

Land telegraphy having demonstrated its great value, the first submarine telegraph "cable" was laid in 1851 between Dover and Calais, a distance of twenty-two nautical miles. Thus telegraphic connection was established between Great Britain and the continent of Europe. Other "cables" were laid soon thereafter by the British, who also financed the first transatlantic cable, laid in 1858 by Cyrus W. Field, an American. In 1865 and 1868 two other transatlantic cables were laid. The last one of these was the cable first operated successfully. In 1868 also was repaired and put to use again the cable laid in 1865, so that America and Europe were now linked by two cables actually in operation. All three of these cables were made in England and owned there. Meanwhile the British cable companies had laid submarine telegraphs to other parts of the world, thus gaining a great lead in the field, which today they hold more firmly than ever before. The first American-owned transatlantic cable was laid by Jay Gould in 1881. Three years later others were established by John W. Mackay, and by

James Gordon Bennett, owner of the *New York Herald*.

A cable is a telegraph wire, or several such wires, plus a covering, or insulation, preventing contact with the water, which, owing to its high conductivity, would otherwise sap the electric current and render the wire useless. In cables containing many wires each conductor has to be insulated against the other. Finally, the cable is given a covering designed to protect it against injury from without.

Submarine cables are operated in the manner of land wires, though, in cables of great length, owing to the conditions arising from the weakening of the current, the receiving apparatus differs somewhat. The current generally is not strong enough to actuate a mechanical receiver. The operation of cables longer than 2,500 nautical miles is not desirable on this account, a fact which is stated here because it has greatly influenced the general cable and international communication situation.

In wireless telegraphy, or radio, the electrical energy is discharged freely into the air, the process being very similar to throwing a stone into a placid pond. The waves formed travel over the earth's surface to whatever distance their original impulse or energy will carry them. What is a

space in wire telegraphy is a wave-length in wireless telegraphy, and upon this distinction are based the arbitrary signs used in both systems of transmission. Wire telegraphy still has one great advantage over wireless telegraphy: The wire is ready for business throughout the year, while the wireless suffers frequently from atmospheric resistance or "static," especially in the summer when the air is charged with electricity. On the other hand, there are no wires in radio that storms can break down. While wire telegraphy confines the message in transmission to a single line, the wireless broadcasts it, so that for dispatches of a confidential nature the use of code or cypher is necessary. At the time Signor Marconi perfected his system, it was believed by many that the end of wire telegraphy had come; today the unbiased view is that wire telegraphy and radio both have their sphere of usefulness, allocated on the one hand by the fact that wire telegraphy goes to precisely the point to be reached and is not interfered with, or interfering, while the radio wave will reach any point to which no telegraph line or submarine cable has been laid or can be laid. The one serious handicap of the radio at the present time is the circumstance that it is only feasible to divide its waves into about 140 different "bands," with each government claiming more than a rea-

sonable share of the total. The United States government, for instance, wishes to reserve 39 waves for itself, which would leave little enough to be divided among all others, even if Europe and Asia, Africa and Australasia would not be reached by many of the waves thus reserved. There is no doubt that this question will be settled satisfactorily by an international radio convention. Moreover, the wireless is still in its infancy and in the course of time scientific endeavor is bound to result in the solution of such problems as are now on hand or may present themselves as the method develops.

So much for the general technical aspects of the case.

The establishing of telegraph systems throughout Europe created the problem of international contact by means of this method of communication. When the lines were under the same government international negotiations in regard to them were not needed. Difficulties however, had to be overcome as the several national systems were brought into physical contact with the intention of using them between points separated by frontiers. A number of conferences were held by the several governments interested, the most important of which took place at Paris in 1865. This was followed by a conference in 1868, at Vienna, and one

at Rome in 1872. At the St. Petersburg conference, 1875, an international telegraph convention was adopted, an instrument in which the rules of international telegraphic relations were laid down. The subsequent conferences held at London, 1879; Berlin, 1885; Paris, 1900; Budapest, 1896; London, 1903; and Lisbon, 1908, occupied themselves with mere routine and small technical matters and left the St. Petersburg Convention very much as it had been.

It is under this convention that international telegraphs, land and submarine alike, are operated today. All governments, in their capacity as owners and operators of telegraph and cable lines, belong to the St. Petersburg Convention, as do all commercial telegraph and submarine cable companies with the exception of the following: The United States of America (for the Philippines and Alaska systems), Canada, Pacific Cable Board, and African Direct Telegraph Company (except for the cable from St. Vincent to San Thiago), All America Cables, Inc., Commercial Cable Company of Cuba, Commercial Pacific Cable Company, Cuba Submarine Telegraph Company, Eastern and South African Telegraph Company, Det Store Nordiske Telegraf-Selskab (excepting its lines in Europe), Halifax and Bermudas Cable Company, Mexican Tele-

graph Company, River Plate Telegraph Company, United States and Haiti Telegraph and Cable Company, West Coast of America Telegraph Company, and Western Union Telegraph Company.

The only telegraph and submarine cable operator in the United States that is a member of the St. Petersburg Convention of 1875 is the Commercial Cable Company of New York, being rated "AC" by the Bureau of the Convention, which means that the company "has acceded to the convention but that its system is joined to independent enterprises which oblige it to introduce, in practice, certain changes derogatory to the international rules."

Though the United States be in effect, therefore, not a member of the St. Petersburg Convention, the fact is that for its foreign telegraph and submarine cable connections, as well as for general and press dispatches of foreign origin, it depends upon the Convention, as will be seen by an examination of the principal articles of the agreement quoted below:

ARTICLE 1. The High Contracting Parties recognize the right of all persons to correspond by means of the international telegraphs.

ARTICLE 2. They undertake to adopt all necessary

measures to ensure the secrecy and prompt despatch of telegrams.

ARTICLE 3. They, however, declare that they accept no responsibility on account of the service of international telegraphy.

ARTICLE 4. Each government undertakes to devote to the international telegraph service special wires, sufficiently numerous to ensure the rapid transmission of telegrams. . .

ARTICLE 5. Telegrams are classed in three categories:

First. Government telegrams . . . and replies to such telegrams.

Second. Service telegrams . . . which relate either to the international telegraph service or to objects of public interest agreed upon between the said administrations.

Third. Private telegrams.

In transmission, government telegrams take precedence of other telegrams.

ARTICLE 6. Government and service telegrams may be sent between all countries in secret language.

Private telegrams may be exchanged in secret language between two states which admit that class of correspondence.

States which do not admit private telegrams in secret language originating in, or destined for, their territory, must allow them to pass in transit, unless the service be suspended as defined in Article 8.

ARTICLE 7. The High Contracting Parties reserve to themselves the right of stopping the transmission of any private telegram which may appear dangerous to the security of the state, or which may be contrary to the laws of the country, to public order, or decency.

ARTICLE 8. Each government also reserves to itself the

right of suspending the international telegraph service for an indefinite period, if it deem necessary, either generally or only upon certain lines and for certain kinds of correspondence, upon condition that it immediately advises each of the other contracting governments. . . .

ARTICLE 13. The provisions of the present convention are completed by service regulations, which at any time may be modified by mutual agreement between the administrations of the contracting states. . . .

ARTICLE 19. Telegraphic relations with non-adhering states or private enterprises are regulated, in the general interest of the progressive development of communication, by the regulations provided for in Article 13 of the present convention.¹

Article 9 of the convention provides that every sender shall be enabled "to profit by the different arrangements agreed upon by the administrations of the contracting states." No 10 refers to the international tariffs, and Nos. 11 and 12 deal with service telegrams and accounts. Article 14 establishes a central office. No. 15 deals with tariff and service regulations; No. 16 with the basis of representation; No. 17 with special arrangements between contracting parties; No. 18 with the conditions of admission, and Nos. 20 and 21 with denunciation and ratification of the convention.

¹ Translated from the French original in *British and Foreign State Papers*, XLVI, p. 19.

The above agreement has served very well for forty-eight years in times of peace. It is in the main an excellent measure and the little difficulties that have arisen now and then have been easily ironed out either by the permanent bureau of the International Telegraph Union, as the office is known, or they have been submitted to the several conferences held since 1875.

As is the case in many another international agreement, the St. Petersburg Convention falls far short of taking care of the contingency of war. All that it does is to absolve easily and frankly its contracting parties in Articles 7 and 8. The right is reserved by them "of stopping the transmission of any private telegram which may appear dangerous to the security of the state, or which may be contrary to the laws of the country . . ." and . . . "of suspending the international telegraph service for an indefinite period . . . either generally or only upon certain lines and for certain kinds of correspondence, upon condition that it (the government) immediately advises each of the other contracting governments."

This is precisely what every government involved in the world war found necessary to do, or did "deem necessary," to use the language of the convention. Of the vast mass of written material that deals with this subject during the recent

war years, only the following really merits attention:

Following the outbreak of the war, in August, 1914, the British government established a censorship over all mail and telegraphic matter. The St. Petersburg Convention remained mute on this point, because the right of establishing censorship is considered by all governments to be inalienable. The British government, then, was within its right in subjecting all mail and telegrams to official scrutiny.

The British censors worked slowly for two reasons. In the first place the staff was small at first and over-meticulous, and, secondly, no censor can go wrong in delaying telegraphic messages, because almost any telegram may have two meanings: the one it carries on its face, and the other—the code meaning. But American merchants had been doing a large business with Europe; the German cables to the United States and Brazil had been cut, France had a censorship even more exasperating, and Great Britain controlled all the other cables and cable stations, including those of the American commercial cable companies. About a month passed and the Department of State found it necessary to do something that would appease the wrath of the American business man whose cables never arrived or were woefully de-

layed. Inquiry was made in London. W. H. Page, the American ambassador to the Court of St. James, finally cabled, on August 23, 1914, the following reply of the British Foreign Office:

As regards enquiries respecting the delivery of such messages as may have been stopped in the public interest, it does not appear to be practicable to remove the prohibition on such enquiries without impairing the usefulness of the censorship.²

This meant that the British government could not see its way clear to giving explanations as to what had happened to cablegrams that had been filed and paid for, without result of any sort so far as the intentions of the sender went.

On September 26th, 1914, the acting Secretary of State, Mr. Robert Lansing, transmitted the following to Mr. Page:

The department has received a great many protests from commercial houses and boards of trade and transportation throughout the United States in regard to the suppression by British censors of cable communications to and from neutral countries. This considerably interferes with legitimate foreign commerce between the United States and neutral countries. You may present the matter to the British Foreign Office with the suggestion that the department deems it very desirable to discontinue suppressing harmless commercial cables.³

² Department of State, *European War*, No. 2, p. 72.

³ *Ibid.*, p. 72.

On October 5th, Mr. Page took the matter up with Sir Edward Grey, who, according to a cable to the secretary of state, dated the 13th, confirmed merely what he had said before, to wit: that no information could be given as to suppressed cablegrams. On the following day, Mr. Lansing cabled to the American ambassador that he thought "notification of non-delivery would be more courteous and just."⁴

The British government never swerved from this course, as is shown by a communication from the office of the British postmaster general, dated November 2nd, 1914:

I am directed by the Postmaster General to point out that Article 8 of the International Telegraph Convention reserves to each of the contracting States the right of suspending the international telegraph service for an indefinite period. Such a notice was issued by the British Government when the present emergency arose, but in order to avoid the inconvenience which would have arisen from a total stoppage of communication it was decided as an *act of grace* to accept telegrams for transmission on the understanding that they were to be accepted at the sender's risk and subject to censorship by the British authorities; that is, that they might be stopped, delayed, or otherwise dealt with by the censors, and that no claim for reimbursement could be entertained.⁵

⁴ *Ibid.*, p. 75.

⁵ *Ibid.*, p. 77.

Such then was the case. All one has to do is to consult the text of the St. Petersburg Convention to find that legally the British government's position was unassailable. For the users of the cables, however, it was a distracting situation. Huge amounts were paid over to the cable companies without the payer having even the satisfaction of learning what had become of his cablegram.

On December second of the same year, the American ambassador in London cabled to the State Department as follows:

I have just received the following statement from Sir Edward Grey:

In connection with complaints about both press and commercial cables, I can make no progress without specific instances of difficulties. The censorship asks that the names of the addressees and senders of stopped telegrams should be given in order that inquiry may be made. The chief censor is willing to make most searching inquiry, and if it is found that any message has been stopped without sufficient *prima facie* grounds, all the necessary steps will be taken to prevent the occurrence of similar cases in future. The chief censor would indeed welcome specific instances, as they would possibly be accompanied by evidence of the innocence of messages that have appearance of being suspicious and this might give a clue to the nature of a whole class of messages. The chief censor is confident that American and Swiss telegrams are not being stopped

wantonly, but only when there appears on the face of them good reasons for supposing that they may be improper messages.⁶

In this case Sir Edward Grey leaned upon Article 7 of the St. Petersburg Convention. Shortly thereafter, the American State Department ceased to be interested in the subject. In the light of an international agreement of thirty-nine years' standing the protests of the American government were doomed to failure before they were made. The fact that the United States had not deemed it necessary to join the International Telegraph Union had no bearing on the matter. Members of the union fared no better, as the neutral states of Europe discovered. The language of Articles 7 and 8 of the St. Petersburg Convention was plain enough, and even if there had been cause for two interpretations the public necessity of the warring governments would have brought about precisely the state of affairs that existed in international communication.

It seems superfluous to point here to the greatest lesson impressed upon the thoughtful mind by the recent war. Agreements of an international character confined to subjects and objectives likely to be overtaken by war are of little or no

⁶ *Ibid.*, p. 81.

value, because the state of war *ipso facto* involves at once the repudiation of all engagements made prior to it. This fact has been disputed; usually in an attempt to set up a double standard for this or that warring government. But at best this is vain circumlocution. Since time immemorial nations have considered their treaties, agreements and understandings with enemy nations null and void as soon as hostilities ensued. When peace returns such engagements as are deemed advantageous are taken up again.

It is so with the means of international communication. There is no good reason why a government or other agency should interfere with the telegraph and submarine cable systems serving another state, and generally this is not done. Seen from this angle it makes little difference as to who owns and controls telegraph lines and cables. When war comes such lines are interrupted anyway, as was the case with the German cables, all three of which were cut immediately following the outbreak of the war. What the fate of the cable of a powerful government remaining neutral would have been may be a fit subject for interesting speculation, but it can not be more. Taking it for granted that an American cable to the coast of Germany would not have been interrupted by

the Allied governments in 1914 or 1915, does not at all warrant the assumption that such a direct communication would have in any way altered the course of events. The German terminal of such a cable would either have been in the control of Germans, in which case the messages sent over it would have been strongly flavored with the German viewpoint, or they would have been in the control of Americans who would be obliged to transmit whatever the land lines fed to the terminal. It is not the cable operator who writes the telegrams but those who send them, with the censor ever ready to strike out what he considers inimical to the welfare of his country or the government that employs him. An American cable to Germany would solely have served German interests during the war. This fact would have been realized and promptly discounted. In times of war the public is skeptical—often unconsciously—and it grows to be doubly skeptical towards him who too often reiterates, with the best intention, perhaps, that he is telling the truth. The able propagandist is he who does not have to vouch for the quality of his literary effort.

The question of international relations and means of communication, then, as here under examination, is not one of remedies but one of pre-

ventives—of prophylactic endeavor to keep nations in a state of normal and sound mentality. The recent war has indeed demonstrated that there are other causes of war than what is usually referred to as misunderstandings. War, so far as governments are concerned, is hardly ever the result of misunderstanding the other aggregate and its government. Quite the opposite is true. The outbreak of hostilities may be the sum of too good an understanding. But with peoples themselves it is rather different. They usually war with others because they do not understand them, which, on the one hand, may be due to lack of spiritual contact, and, on the other, to misinformation purposely disseminated.

The question of having international communication free and unhampered—beyond the control or influence of governments in a position to profit by two other peoples and their governments misunderstanding one another—is therefore a very important one. As already stated, this is not a question of applying remedies when the crisis has come and when the means of international communication are bound to come within the domain of the laws and rules in favor of the state's public security, but one of preventing such crises arising. The day on which governments at war will not interfere, so far as they may, with the

means of communication of the enemy, will mark the end of all war. With such interference an integral part of what is known as sovereignty, and with the same interference bound to disturb that part of international communication which lies within the territory of the warring governments, nothing can be hoped for once hostilities are in progress. The authors of the St. Petersburg Convention realized this, and, being practical men dealing with a very practical matter, that is, telegraphy as a business, promised the world very little in the document they drew up and signed. Of all international agreements the convention in question is by far the most honest and thoroughgoing. Articles 7 and 8 of the convention state merely what every government deems its right. So long as the land telegraph lines within the territory of a state must of necessity be subject to the laws of that state, so long as landing stations of cables are not given, or can not be given, an extraterritorial status, and so long as it is a military necessity to cut such of the enemy's cables and land lines as can be reached, so long will we have a repetition of what occurred during the years 1914-1920.

This is clearly not a case of fighting the fire that is started, but of seeing that no fire will start. Seen in that light one can not but be rather im-

pressed by the fact that those who have labored so assiduously at war prevention have given not the least attention to the problem of international communication.

CHAPTER II

THE CABLE POLICY OF THE UNITED STATES

Though the federal government of the United States has not been remiss in legislation in regard to land and submarine telegraphs, it cannot be said that it has ever promoted such undertakings by subsidizing them, as has been the general practice of foreign governments.¹

The plan to lay the first transatlantic cable to the North American shore caused in 1857 the Congress of the United States to pass "an act to expedite telegraphic communication for the uses of the Government in its foreign intercourse."² In it the Secretary of State, under the direction of the President, is authorized to enter into contracts with competent persons to furnish not exceeding two ships in laying a cable to connect existing telegraphs between the coasts of Newfoundland and Ireland. Provision is also made in the act for

¹ The endeavors in that direction of the British government being made plain by the table of subsidies to be found on page 259.

² Act of March 3, 1857, 11 *Statutes at Large*, 187.

the fixing of cable tolls by the Secretary of the Treasury and for complete equality in the status of the American citizens and British subjects whose co-operation in the laying of the cable is contemplated.

The next step by Congress was the act passed in 1864 "to encourage and facilitate telegraphic communication between the eastern and western continents,"³ in which one Perry MacDonough Collins, of California, is authorized to construct and maintain telegraph lines through territories of the United States to the boundaries of British America to connect there with lines previously authorized by Great Britain and Russia. The act provides that the American government is to have priority in the use of the lines within its territory, and that the usual rates in Europe and America shall prevail.

Two years later was passed "an act to encourage telegraphic communication between the United States and the island of Cuba and other West Indian Islands and the Bahamas,"⁴ in which one James A. Scrymser and others, composing the International Ocean Telegraph Company, were empowered to lay a submarine telegraph from the coast of Florida to the island of Cuba, the Ba-

³ Act of July 1, 1864, 13 *Statutes at Large*, 340.

⁴ Act of May 5, 1866, 14 *Statutes at Large*, 44.

hamas and other West Indian Islands, and to have the sole privilege thereof for fourteen years.

This was followed in 1867 by "an act to grant to the American Atlantic Cable Telegraph Company, of New York, the right of way and privilege to lay, land, and operate a submarine telegraph cable on the Atlantic coast of the United States, and establish telegraph communication between the United States and Europe, via the Bermudas and Azores Islands."⁵ The act granted these privileges to the company in question for twenty years, but excepts from its operation the coast of Florida, which had in the previous year been allotted to the Scrymser company.

For the next ten years the Congress of the United States failed to occupy itself with the question of submarine cables, except that Congress inserted in the naval appropriations act of 1873 the provision "that the Secretary of the Navy be, and he hereby is, authorized to make soundings between the western coast of the United States and Japan, for scientific purposes, and for the purpose of determining the practicability of laying a telegraph cable between these points. No appropriation accompanied the authorization."⁶

⁵ Act of March 29, 1867, 15 *Statutes at Large*, 10.

⁶ Act of March 3, 1873, 17 *Statutes at Large*, 547, 556.

From then onward Congress considered the matter of cable landing to be an executive function. No law to that effect was passed. It was acquiescence by Congress rather than power conferred upon the executive in any manner or by any means that brought about this condition.

The possibility of a foreign company wishing to land a cable on the American shore itself had been overlooked. Out of this arose a rather awkward situation when the French Cable Company made application, in 1869, for a cable landing at Duxbury, Massachusetts. The company was in possession of a monopoly from the French government extending over a long term of years. President Grant refused permission for the landing of the cable on the ground that the monopoly condition contained in the concession given by the French government was objectionable.

In his message to Congress of December 7, 1875, President Grant stated:

In the absence of legislation by Congress, I was unwilling, on the one hand, to yield to a foreign state the right to say that its grantees might land on our shores, while it denied a similar right to our people to land on its shores; and, on the other hand, I was reluctant to deny to the great interests of the world and of civilization the facilities of such communication as were proposed. I therefore withheld any resistance to the landing of the cable on

condition that the offensive monopoly feature of the concession be abandoned, and that the right of any cable which might be established by authority of this Government to land upon French territory, and to connect with French land-lines, and enjoy all the necessary facilities or privileges incident to the use thereof upon as favorable terms as any other company, be conceded. As the result thereof the company in question renounced the exclusive privilege, and the representative of France was informed that, understanding this relinquishment to be construed as granting the entire reciprocity and equal facilities which had been demanded, the opposition to the landing of the cable was withdrawn. The cable, under this French concession, was landed in the month of July, 1869, and has been an efficient and valuable agent of communication between this country and the other continent. It soon passed under the control, however, of those who had the management of the cable connecting Great Britain with this continent, and thus whatever benefit to the public might have ensued from competition between the two lines was lost, leaving only the greater facilities of an additional line, and the additional security in case of accident to one of them. But these increased facilities and this additional security, together with the control of the combined capital of the two companies, gave also greater power to prevent the future construction of other lines, and to limit the control of telegraphic communication between the two continents to those possessing the lines already laid. Within a few months past a cable has been laid, known as the United States Direct Cable Company, connecting the United States directly with Great Britain. As soon as this cable was reported to be laid and in working order, the rates of the then existing consolidated com-

panies were greatly reduced. Soon, however, a break was announced in this new cable, and immediately the rates of the other line, which had been reduced, were again raised. This cable being now repaired, the rates appear not to be reduced by either line from those formerly charged by the consolidated companies.

There is reason to believe that large amounts of capital, both at home and abroad, are ready to seek profitable investment in the advancement of this useful and most civilizing means of intercourse and correspondence. They await, however, the assurance of the means and conditions on which they may safely be made tributary to the general good.

As these cable telegraph lines connect separate states, there are questions as to their organization and control, which probably can be best, if not solely, settled by conventions between the respective states. In the absence, however, of international conventions on the subject, municipal legislation may secure many points which appear to me important, if not indispensable for the protection of the public against the extortions which may result from a monopoly of the right of operating cable-telegrams, or from a combination between several lines:

I. No line should be allowed to land on the shores of the United States under the concession from another power, which does not admit the right of any other line or lines, formed in the United States, to land and freely connect with and operate through its land-lines.

II. No line should be allowed to land on the shores of the United States which is not by treaty-stipulation with the government from whose shores it proceeds, or by prohibition in its charter, or otherwise to the satisfaction of this Government, prohibited from consolidating or

amalgamating with any other cable, telegraph line, or combining therewith for the purpose of regulating and maintaining the cost of telegraphing.

III. All lines should be bound to give precedence in the transmission of the official messages of the governments of the two countries between which it may be laid.

IV. A power should be reserved to the two governments, either conjointly or to each, as regards the messages dispatched from its shores, to fix a limit to the charges to be demanded for the transmission of messages.

I present this subject to the earnest consideration of Congress.

In the meantime, and unless Congress otherwise direct, I shall not oppose the landing of any telegraphic cable which complies with and assents to the points above enumerated, but will feel it my duty to prevent the landing of any which does not conform to the first and second points as stated, and which will not stipulate to concede to this Government the precedence in the transmission of its official messages, and will not enter into a satisfactory arrangement with regard to its charges.⁷

President Grant's views on submarine telegraphs and international communication had a favorable effect upon the action of Congress, when, in 1876, it passed "an act to encourage and promote telegraphic communication between America and Asia," giving to Celso Cæsar Moreno and others the right to lay a cable between the American and Asiatic coasts, under the conditions that:

⁷ *U. S. Foreign Relations*, 1875, pp. xiv-xvi.

The Government of the United States shall be entitled to exercise and enjoy the same or similar privileges with regard to the control and use of such line or lines or cable or cables that may, by law, agreement, or otherwise, be exercised and enjoyed by any foreign government whatever; secondly, citizens of the United States shall enjoy the same privileges as to the payment of rates for the transmission of messages as are enjoyed by the citizens of the most favored nations; thirdly, the transmission of despatches shall be made in the following order: first, despatches of state, under such regulations as may be agreed upon by the governments interested; secondly, despatches on telegraphic service; and, thirdly, private despatches; fourthly, the lines of any such cables shall be kept open to the public for the daily transmission of market and commercial reports and intelligence, and all messages, despatches, and communications, shall be forwarded in the order in which they are received; fifthly, before extending and establishing any such line or lines or cable or cables in or over any waters, reefs, islands, shores, and lands within the jurisdiction of the United States, a written acceptance of the terms and conditions imposed by the act shall be filed in the office of the Secretary of State by the said company. . . .

But nothing in this act shall be construed to limit the United States in granting to other persons or companies similar privileges herein contained.⁸

The influence of the presidential message is also demonstrated in "an act to encourage and promote telegraphic communication between

⁸ Act of Aug. 15, 1876, 19 *Statutes at Large*, 201.

America and Europe,"⁹ in which Ferdinand C. Latrobe and others were given the right to lay certain cables between America and Europe, on the conditions that the prevailing cable rates were to be reduced by the company from three shillings, to one shilling, British, per word, and "that no amalgamation, union, or sale of cable interests established under this act shall be made to any existing European or other cable-companies." In addition, the act imposed the same conditions and reservations contained in the Act of August 15, 1876.

In the meantime, the Direct United States Cable Company, a British corporation, had taken over the rights of the American Atlantic Cable Telegraph Company, of New York, created by the Act of March 29, 1867. It having been ascertained that the articles of association of the British corporation included no monopolistic features, permission to land the cable at Rye Beach was finally granted, as stated in the communication under date of January 2, 1877, by Hamilton Fish, then Secretary of State.

On receiving such assurances from the promoters of the company, the President [Grant] decided to withhold resistance to the landing of their cable.

⁹ Act of Feb. 20, 1877, *Ibid.*, 232.

The President adheres to the views which he expressed to Congress in December, 1875, that no line should be allowed to land on the shores of the United States which is not, by prohibition in its charter or otherwise to the satisfaction of the Government, prohibited from consolidating or amalgamating with any other cable telegraph line, or combining therewith for the purpose of regulating and maintaining the cost of telegraphing.

These views are understood to have met the approval of Congress and of the people of the United States, indicated by the tacit acquiescence of the Congress, and by the expressed approval of individual members of that body, and the general approval of the public press of the country. In the same message the President announced that the right to control the conditions for the laying of a cable within the jurisdictional waters of the United States, to connect our shores with those of any foreign state, pertains exclusively to the Government of the United States, under such limitations and conditions as Congress may impose. And he further stated that, unless Congress otherwise direct, he would feel it his duty to prevent the landing of any telegraphic cable which does not conform (among others) to the point above referred to.

The President is of the opinion that the control of the United States over its jurisdictional waters extends to the right of discontinuing and preventing their use by a cable, whose proprietors may violate any of the conditions on which the Government by acquiescence or silent permission allowed its landing as well as to the resistance and prohibition of an original landing.¹⁰

On October 24, 1879, William M. Evarts, who

¹⁰ *Sen. Exec. Docs.*, 49 Cong. 2 sess., No. 122, pp. 11-12.

had succeeded Fish as Secretary of State, was notified that the "Compagnie Française du Télégraphe de Paris à New York" desired permission to land a cable at Cape Cod, Massachusetts, which was to be extended to New York by means of a land line already constructed by the American Union Telegraph Company of New York. The French company was organized under the laws of France, with fifty-two million francs capital. It had two cables partly laid and had projected a third, all three of them to connect America with Europe. One of the cables was to stretch from Brest to St. Pierre, thence to Cape Cod, thence to New York overland; the other cable was to connect Brest with England, thence to St. Pierre, thence to Cape Breton.¹¹ The system would enjoy the advantage of having in St. Pierre a French relay point where messages to and from France, England, Canada and the United States could be routed to a direct connection.

Secretary Evarts replied on October 27, three days later, to the effect that "this Government regards with favorable consideration all efforts to extend the facilities for telegraphic communication between the United States and the nations of Europe, in the interest of the important and rapidly increasing demands of general commerce,"

¹¹ *Ibid.*, p. 72.

and further on states that "the authority of the Executive Government to admit the laying of transmarine cables . . . is exercised only in the absence of legislation by Congress regulating the subject, and concessions of the privilege, heretofore, have been subject to such future action of Congress in the very matter of such concessions as it should at any time take."¹²

At the same time, Evarts transmitted to the representative of the French cable company, G. von Chauvin, a memorandum on the conditions required by the American government.

1. That the company receive no exclusive concession from the Government of France which would exclude any other line which might be formed in the United States from a like privilege of landing on the shores of France and connecting with the inland telegraphic system of that country.

2. That the company shall not consolidate or amalgamate with any other line, or combine therewith, for the purpose of regulating rates.

3. That it shall give precedence in the transmission of official messages to the Governments of the United States and France.

4. That charges to this Government shall be at the rate of those to the Government of France, and the general charges shall be reasonable.

5. That the Government of the United States shall be entitled to the same or similar privileges as may by law,

¹² *Ibid.*, pp. 73-74.

regulation or agreement be granted to the French Government.

6. That a citizen of the United States shall stand on the same footing, as regards privileges, with the citizens of France.

7. That messages shall have precedence in the following order: (a) Government messages; (b) telegraphic business; (c) general business.

8. That the line shall be kept open for daily business, and all messages, in the above order, be transmitted according to the time of receipt.¹³

Acquiescence to the above rules having been given by the French company, Evarts, on November 10, 1879, informed it that the cable could be landed. It may not be amiss to reproduce here part of a letter written by G. von Chauvin, which shows that the French company had taken a great deal for granted in regard to getting permission from the United States government to land the cable. Under the date of October 24, 1879, Chauvin informed the American Secretary of State not only of the fact that the American Union Telegraph Company had constructed an overland telegraph line from Cape Cod to New York, but that the same company had bought for the French cable company the necessary land on Cape Cod for the landing of the cable and had entered into an exclusive interchange of traffic with

¹³ *Ibid.*, pp. 75-76.

the cable company; further, that the cable intended to be landed on the shores of the United States had already been laid as far as the island of St. Pierre, and that the steamship *Farraday* was then waiting at St. Pierre to lay the cable to Cape Cod.¹⁴ The American government was thus placed before as awkward a *fait accompli* as could be presented.

However, the end of this case was not yet at hand. Though Chauvin had on November 5, 1879, accepted the conditions laid down by the American government, with some slight changes, Secretary Evarts received on January 12, 1880, a communication which considerably upset things. The note from the French embassy contained an extract from the minutes of a meeting held by the Board of Management of the French cable company, including a resolution adopted at the meeting, which read:

The French Telegraph Company from Paris to New York hereby declares that it accepts, so far as it is concerned, the conditions established by the American Government for the landing of its cable from St. Pierre, Newfoundland, at Cape Cod, on the coast of the United States of America.¹⁵

This document was accompanied by another —

¹⁴ *Ibid.*, p. 73.

¹⁵ *Ibid.*, p. 78.

both of them transmitted to the French embassy at Washington through the Minister of Foreign Affairs of France—in which were laid down the conditions under which submarine cables could be landed on the French coast by the French Telegraph Company from Paris to New York. These were :

- (a) That the company could land one or more transatlantic cables on the coast of France;
- (b) Without having special privileges;
- (c) The French government to determine the point of landing;
- (d) The transmission of French governmental dispatches to be gratuitous, the exercise and limits of this right to be fixed by special orders;
- (e) The line to be established and operating within two years;
- (f) "The price for transmission by the new transatlantic line shall not exceed 3 francs 75 centimes per word between any point in France and those localities in America where telegrams are now received at that rate. And the company shall pay to the French Government a percentage of all sums so received equal to that which is collected by the French Government on the

transmission of dispatches by cable of the Anglo-American Company”;

- (g) The cable of the company to be subject to the rules of the St. Petersburg telegraph convention and regulations, or other similar agreements to be made in the future;
- (h) “The Government reserves the right to exercise, at the expense of the recipient of the concession, such control (or surveillance) over the service of the line as it may think proper. The department of posts and telegraphs shall be the medium between the company and the public in everything having reference to the operations of the service. The company shall retain the exclusive management of the cable, but all other operations, such as the collection of the tax when a telegram is transmitted, the delivery of telegrams on their arrival, the resending of telegrams *in transitu*, shall be performed solely by the French department at the expense of the recipient of the authorization”;
- (i) The company shall not transfer the rights obtained to any other concern, French or foreign, without the consent of the French government;
- (j) The sum of 300,000 francs is to be deposited

as security, within one month of date (Jan. 7, 1879) for the performance of the contract, to be refunded by the French government upon submersion of the cable;

- (k) The company to furnish evidence within four months of the same date of its legal constitution, under penalty of forfeiting the above bond;
- (l) The telegraphic engineers of the government to have the right to inspect the factories and workshops where the cable was being manufactured, and to do this at the expense of the company;
- (m) The authorization to be void if the cable of the company for lack of proper effort of the same should be out of repairs for two years, or out of commission for any cause for three years, or "in case of a failure to execute the other essential clauses of this concession, especially those of Articles 9 and 11" (here indicated by "i" and "k"); such disputes as may arise between the French Government and the company to be adjudicated by the Board of Prefecture of the Department of the Seine, with appeals to be taken to the Council of State;
- (n) Duty to be paid on cables of foreign manu-

facture laid into French waters or upon French soil.¹⁶

As against this iron-clad contract, M. von Chauvin, acting for the French company, accepted in their entirety the conditions laid down by the American Government in Mr. Evart's memorandum of October 27, 1879, paragraphs 4 and 6 of which read:

4. That charges to this Government [American] shall be at the rate of those to the Government of France, and the general charge shall be reasonable.

6. That a citizen of the United States shall stand on the same footing, as regards privileges, with the citizens of France.

Numbers 4 and 6 of the conditions offered later by the French Telegraph Company, as proposed by Count Dillon, its director-general, and by M. Pouyer-Quertier, its promoter and president of the council of administration, read as follows:

4. That the rates charged to the Government of the United States shall be the same as those charged to the Government of France, and that rates charged to the general public shall never exceed the present rates, viz., 3 shillings per word.

6. That the citizens of the United States shall stand

¹⁶ *Ibid.*, pp. 78-80.

on an equal footing with those of France so far as regards the transmission of messages over the company's lines.¹⁷

Secretary Evarts objected to this sort of procedure in a letter dated January 23, 1880, pointing out what has been set forth above, affording a comparison of the original and the revised Articles 4 and 6 and concluding his communication as follows:

I need not point out the essential difference between an engagement to this Government that the charges of this company to the public should be *reasonable*, and an engagement that they should not exceed the charges of the cables already in operation, the unreasonableness of which had formed the main motive for the encouragement of a new and independent cable, that by just competition might reduce the existing oppressive rates. I have to beg that you will call the attention of the company to this matter, to the end that they may promptly conform their formal acceptance to the requirements of this Government, upon their acceptance of which, understood to be already in the hands of your Government, the permission to land the cable was given.¹⁸

On February 23, 1880, Evarts received a letter from Max Outrey, the French ambassador at Washington, containing the following:

Although, in my opinion, the document signed by the duly authorized agent of the company, which is in your

¹⁷ *Ibid.*, p. 80.

¹⁸ *Ibid.*, pp. 81-82.

hands, is the only one that can be binding upon the parties, I have, nevertheless, hastened to transmit your observations to the proper parties, asking that a ratification be made as you desire.¹⁹

Meanwhile, Chauvin, the New York representative of the French Cable Co., had also written to Evarts a letter, reading, after an introductory restatement, as follows:

I am now instructed by my company to say that the divergency complained of in your communication of the 23d of January had arisen through a mistake, and was not in any way intentional.

My company has further instructed me to apologize for this error, and to inform you at the same time that a correct copy of the memorandum of conditions imposed by your Government has since been executed by the president of my company, and that this copy is now on its way to this country.

I am further instructed to say that inasmuch as my company's cable from Brest to England has not yet been laid, and the system of my company cannot be considered as fully open for public traffic, the tariff of 3 shillings a word was considered as a provisional one, and that it was not the intention of my company to maintain it. . . . My company will not attempt to exact for the transmission of messages a tariff superior to what which . . . it will be necessary for my company to demand from the telegraphing public in order to be able to pay, with a careful and economic management, a fair and proper interest on the capital invested.²⁰

¹⁹ *Ibid.*, p. 82.

²⁰ *Ibid.*, pp. 82-83.

Shortly thereafter the incident was closed in the manner indicated above.

A comparison of the conditions imposed by the French government with those thought ample by the American government shows that the latter continued to be satisfied with the very minimum of safeguards. In fact, the only feature of international communication in which the Government in Washington was interested, or had been interested at any time, was the question of cable rates. These rates were deemed excessive, though in reality the position of the cable companies was not always properly considered. The business was still new, and commerce had not yet acquired the habit of moving by seconds, with the result that the cables in operation were not always as crowded with traffic as would have made reduction in rates feasible. And here it should not be overlooked that the money invested in the cables was foreign money, as the average American saw it, and, therefore, hardly entitled, in the popular mind, to earn as much as it seemed to be earning. However, with such foibles the foreign investor has ever been obliged to contend.

The attitude of the American government as described by President Grant, was the proper one, of course, even if the Act of Congress of May 5, 1866, had granted to the International Ocean

Telegraph Company, a New York corporation, the right to charge as much as \$3.50 for messages of ten words over its short cable from Florida to Cuba, the Bahamas and other West Indian Islands,²¹ a rate that was not at all low, considering the capital invested. The case indicates that, as is often the case in such matters, Congress and the President were not one in their attitude toward cables.

It would seem that one of the reasons for the lenient attitude of the American government toward cable companies was the fact that during the years marked by the rapid development of the submarine cable lines between the United States and Europe money for such enterprises was hard to find in the United States. For instance, Cyrus W. Field had to go to England in 1858 to find the capital for his enterprises. After the Civil War, the country entered upon the period of its most rapid development, a circumstance which invited domestic capital to more profitable pursuits at home. Face to face with these conditions, the American government was obliged to reconcile one necessity with the other. The result was a cable policy that saw no further than the cable rate.

In March, 1882, Congress passed "an act to encourage and promote telegraphic communica-

²¹ 14 *Statutes at Large*, 44.

tion between America and Europe,"²² by which rights to lay cables between the American and European coasts were granted to Samuel L. M. Barlow and others upon the same general conditions as those granted in 1876 to Moreno for an Asiatic cable, with the specific provisions "that no amalgamation, combination to establish rates, union, or sale of cable interests established under this act, shall be made to any European or other cable companies, . . . and any violations of the provision of this section shall work a forfeiture of all rights thereunder," and that the United States government should have exclusive use of the wire under certain conditions as to time and rates.

On December 4, 1883, Secretary of State Frelinghuysen received the following letter:

Sir: Messrs. J. W. Mackay, James Gordon Bennett and their associates propose to lay a telegraph cable between the coast of Europe and the United States, and respectfully apply to you for the permission to land the American end of their cable upon such part of the coast of the United States as they may determine on, subject to such conditions as you usually impose.

Very respectfully,

J. W. MACKAY, J. G. BENNETT, AND ASSOCIATES,
Per CHAS. NORDHOFF.

²² Act of Aug. 8, 1882, 22 *Statutes at Large*, 371. A similar landing license was given in the same year (1882) to a company headed by Robert Garrett for an Atlantic cable, except that the right of exclusive use was not included in the conditions. (Act of July 25, 1882, *Ibid.*, p. 173.)

To this, Frelinghuysen replied on the following day:

... This Government regards with favorable consideration all efforts to extend the facilities for telegraphic communication between the United States and other nations, and in pursuance of this sentiment the President is desirous of extending every facility in his power to promote the laying of the cables. While there is no special statute authorizing the Executive to grant permission to land a cable on the coast of the United States, neither is there any statute prohibiting such action; and I find on examination of the records of this Department that in 1875 conditional authority was given to land a French cable at Rye Beach, New Hampshire, and that in 1879 permission was given to land a cable at Cape Cod.

These precedents seem to justify a similar concession to the promoters of the present enterprise, which there is the less hesitation in according as they are citizens of the United States.

The authority of the executive branch of the Government to grant permission is exercised only in the absence of legislation by Congress regulating the subject, and concessions of the privileges heretofore have been subject to such further action by Congress in the matter as it may at any time take. . . .

The privileges of landing cables which have heretofore been granted have been given under certain conditions. These conditions are substantially the same as those outlined in the President's annual message to Congress, December, 1875; . . . with the additional one that the United States Government shall have the right to the exclusive use of a wire at such time or times as they may

require, not exceeding four hours out of every twenty-four, and at such rates as may be prescribed by the Secretary of State, but not to exceed 20 cents a word, nor less than 10 cents per word, as found embodied in that act.

. . . The President directs that "the company" which you represent shall be granted permission to land a cable on the coast of the United States at such point as the promoters may determine, and such permission is accordingly hereby granted to that company, this concession to become operative when the said company shall have filed in the Department of State a formal acceptance of the grant in writing, under the corporate seal and the signature of its proper executive officer.²³

With the exception of being interested in low cable tolls, the government of the United States failed to concern itself intelligently with the question. The political feature of cable connections was given no heed whatever. At least there is no record of this important consideration in international communication being viewed from any other angle of national welfare. The result was that all new cables between Europe and America were laid, as the older ones had already been laid, from foreign points to foreign points. Leaving landings in Great Britain, France and the Portuguese Azores, the cables intended to serve the American people in matters of commerce and intelligence were brought to St. Johns, Heart's Content and

²³ *Sen. Exec. Docs.*, 49 Cong. 2 sess., No. 122, pp. 83-84.

Roberts Bay in Newfoundland, and Canso, Nova Scotia, with such points as Port au Basque, Colinet, Island Cove, all in Newfoundland: North Sydney, in Nova Scotia, and St. Pierre, Colony of St. Pierre and Miquelon (French), as second relays, and with the land wires between the landing stations to the boundary of the United States likewise on foreign territory.

Today, then, only one cable between the United States and Europe is not subject to British control, that of the French company from Brest to Cape Cod. All the other sixteen cables between the two continents have their landings on British soil, except as we consider the Azores islands Portuguese territory, which they are nominally, but actually are not. In the course of time the Azores have passed under the control of the British Eastern and Western Telegraph Companies—the same corporation operating under two names, — while Portugal herself has been for almost a century little more than a vassal state of the British empire. The fact that the necessities of the British empire produced this situation does not in any manner alter the attending circumstances. At Carcavelos, in the immediate neighborhood of Lisbon, Portugal, is located one of the main bases of the British cable companies. At Villa Real, Portugal, has been established an important sub-

base en route to Gibraltar, while the islands of Cape Verde (St. Vincent) and Madera (Funchal) have become indispensable to British cable communication to Africa and South America and the West Indies, with the islands of St. Thomas and Prince, off the Central West African coast, hardly less important than such Portuguese points in continental Africa as Loanda, Beneguela, Mossamedes, Lorenço Marquez, Beira and Mozambique.

As against this most thorough and comprehensive British cable policy, the government of the United States presented nothing but a carping attitude in regard to cable tolls over lines in which not a cent of American money was invested; in enterprises the risks of which were borne by individuals who owed not the least allegiance to the United States and whose reception left often much to be desired. America was in this respect ever ready to receive but was unwilling to give, so far as its Congress was involved. While the executive branch of the government showed liberality in the matter of cable landings it did so in the hope that easy terms would bring direct to the shores of the United States a cable which otherwise would be landed on British soil—either in Nova Scotia or Newfoundland. Though documents on the subject are mute on that point, it is

hardly possible that the executive branch of the government, having the advice of naval and military men, could have remained ignorant of the importance of cables in the national defense scheme.

Be that as it may, no definite cable policy based on the strategic value of controlling cables was ever evolved by the government of the United States so that today of seventeen cables in operation only one touches at an American point direct, with all others subject to the conditions set out in the landing licenses recently issued by the British Board of Trade to the Commercial Cable and Western Union Telegraph Companies.²⁴

On March 8, 1920, the Western Union Telegraph Company, guided by what had been the rule in the past in respect to cable landings in the United States, made application to the Department of State for permission to land at Miami, Fla., a cable running in from Barbados island, at which point the cable was to connect by automatic relay with a cable of the Western Telegraph Company, a British corporation subsidiary to the Eastern Telegraph Company, the monopolistic concessions of which, in Brazil, had for a long time been a thorn in the side of the All-America Cables, Inc., a United States corporation which had taken

²⁴ See page 110.

over the many exclusive concessions obtained in Latin America by James A. Scrymser and Fralick, Murphy & Co.

After looking into the facts, the State Department, with the approval of President Wilson, refused to grant such a permit. The reason given for refusal was that the cable of the Western Telegraph Company running into Barbados was part of a monopoly. Moreover, the government of the United States wanted the Western Union cable to join up with Porto Rico for strategic reasons — the first instance in which the United States government appreciated the strategic, that is the political, importance of a cable. It was pointed out that the monopoly of the Western Telegraph Company was absolute and had been exercised to the total exclusion of direct communication between the United States and Brazil. So rigorously had the British company stuck to its exclusive privileges in Brazil that to reach points in southern Brazil directly it was necessary to send the message down the entire length of the west coast of South America, then across the continent to Buenos Aires and then north again.

Meanwhile, the Barbados-Miami cable had been manufactured and loaded for laying without the Western Union having the least intimation that the granting of the landing permit would not

be in this case, as it had always been with an American concern, a mere matter of form.

On March 25, 1920, the Western Union Telegraph Company was informed, orally and in writing, that, for the reason already stated, no landing permit would be issued. Nevertheless, the company went on with its plans, with the result that on July 20, 1920, President Wilson authorized the war, navy and justice departments to prevent the landing of the cable at Miami, where it was about to be submerged from within three miles off Miami Beach.

Rear Admiral Decker, U. S. N., had been dispatched to Florida to prevent the landing of the cable. On August 6 his place was taken by Rear Admiral Anderson. At ten o'clock in the morning of that day the British cable-laying ship *Colonia* anchored off the three-mile limit at Miami. Rear Admirals Decker and Anderson, of the navy, and Colonel Tebbets, for the U. S. army, boarded the vessel in the company of the British vice consul at Miami. The latter informed the captain of the *Colonia* that he was not to proceed with the cable into Miami until he had instruction to the contrary from the British ambassador at Washington. On August 11, however, upon instructions received from the British government direct, through the officers of the Western Union Telegraph Com-

pany, the *Colonia* proceeded to pay out the cable in the direction of Barbados, starting from a buoy three miles out of Miami. An attempt made by the Western Union to connect this cable head with the landing station by means of a cable on the cable-laying tug *Robert Clowery* was put to an end by Rear Admiral Anderson.

A memorandum of the Department of State, dated April 28, 1920, says in part:

The first and minor consideration was the request of the Navy Department that if any cable were permitted to be landed in this country under the circumstances it should be on condition that it connect up with Porto Rico, St. Thomas, and Haiti, so that official Government business with those places would receive quicker transmission and also their strategic value as outposts greatly increased.

The second consideration was the matter of the exclusive grant which the Western & Brazilian Telegraph Co., an English concern, with which the Western Union proposes to connect at Barbados, had in Brazil.

This objection was based on the established policy of the department to refuse landing licenses in this country when the country with which the cable connected refused to allow American cable concerns to land on its shores. The policy of the government was stated by President Grant in his controversy with the French Cable Co., and in fact forms the basis of representations which this department has recently made to the French Government, at the request of the Western Union Telegraph Co., because it is not allowed to maintain offices and branch agencies

throughout France, this privilege being monopolized by the French Government.

It was pointed out to Mr. Taff [Washington representative of the Western Union Telegraph Co.] that this department would not consent to the laying of a cable where it was believed that its object was to evade this well-established rule, by landing on an island or intermediate point and connecting with a company which had exclusive rights in the foreign country, whose business was the real objective involved. In the present case the laying of the cable to Barbados clearly was not for the purpose of handling British business from Barbados, but, as Mr. Carlton [President of the Western Union Telegraph Co.] stated on April 24, it was planned to have automatic repeaters installed at Barbados which would connect with the lines of the Western & Brazilian Telegraph Co. and forward messages directly to Brazil.²⁵

The attempt was made at the time to induce the Brazilian government to commit itself to a policy of granting cable landing licenses to American citizens. This, however, failed, because the exclusive privileges granted the British company took in all of the northern shores of Brazil, while the British company themselves refused to surrender any part of their concessions.

The Western Union Telegraph Co. took the matter into the courts, a step which so little pleased President Wilson that, on November 20,

²⁵ *Cable-Landing Licenses: Hearings before a Sub-committee of the Committee on Interstate Commerce, U. S. Senate* [1921], p. 257. This document is hereinafter identified as "CLH."

1920, he revoked the executive permit for the landing of three cables by the company in Key West Harbor, granted under date of April 16, 1917. These cables were to connect with Cojimar, Cuba, an island well served by British cable companies. This revocation was accompanied by a new permit, which granted the concession to land the cables from Cojimar but forbade connection with the British cables.

The controversy finally gave rise to the introduction in the Senate, and the passage of a bill providing:

That no person shall land or operate in the United States any submarine cable directly or indirectly connecting the United States with any foreign country, or connecting one portion of the United States with any other portion thereof, unless a written license to land or operate such cable has been issued by the President of the United States: . . .

That the President may withhold or revoke such license when he shall be satisfied after due notice and hearing that such action will assist in securing rights for the landing or operation of cables in foreign countries, or in maintaining the rights or interests of the United States or of its citizens in foreign countries, or will promote the security of the United States, or may grant such license upon such terms as shall be necessary to assure just and reasonable rates and service in the operation and use of cables so licensed: . . .

That the President is empowered to prevent the landing

of any cable about to be landed in violation of this Act. When any such cable is about to be or is landed or is being operated, without a license, any district court of the United States exercising jurisdiction in the district in which such cable is about to be or is landed, or any district court of the United States having jurisdiction of the parties, shall have jurisdiction, at the suit of the United States, to enjoin the landing, or operation of such cable or to compel, by injunction, the removal thereof.²⁶

It was in connection with testimony taken by a subcommittee of the Senate Committee on Interstate Commerce that cable matters in the United States and elsewhere were given a thorough discussion. One of the questions that came up was whether or not the control of cables by foreign companies and governments was in the main satisfactory to the interests of the United States. Replying to a question hereto related, Norman H. Davis, then Undersecretary of State of the United States, told Senator Kellogg, of Minnesota, chairman of the subcommittee:

Well, there is a disadvantage, Senator, if the messages are absolutely inviolate. Of course, I may say there is a sentiment, considerable sentiment, in this country which I have ascertained by various conferences that I have had in relation to this present conference of cable communications; there is considerable sentiment in the country against our messages going through any foreign country

²⁶ Act of May 27, 1921, 42 *Statutes at Large*, 8.

or corporation, going to some other country. Just how much the censorship during the war, which was exercised, had to do with creating this feeling, and as to what happened since, I am not entirely clear. But the sentiment does exist. I would not, however, care to imply that it is violated by any of the countries now.²⁷

Another point that was strongly developed was that the government of the United States was not greatly edified with the action taken by the governments of Great Britain, France and Japan in regard to the German cables.

MR. DAVIS. There were two cables that landed on Long Island and from there to the Azores and from the Azores to Emden, Germany. Those were the only two that directly touched the United States.

THE CHAIRMAN. By those cables it was possible to send business, and business was sent, to Germany, without using the British post office and telegraph lines or the French telegraph lines?

MR. DAVIS. Yes, sir. . . . And from there to any place in Central Europe or Scandinavia. . . . At the very beginning of the war those lines were both cut in the English Channel and one of them was landed in Pendance [Penzance], England, and the other landed at Brest, France. Then in the latter part of 1916 one of the cables — which we will call No. 1, and was tied at Pendance — was cut by the British naval authorities about 600 miles out from New York and a cable was spliced on and tied at Halifax, which left this 600 miles of derelict cable in the ocean.

²⁷ CLH, p. 11.

This cable, while it was cut in 1916, was actually placed in operation, I think, in June, 1917, shortly after we entered the war. The other cable, which had its terminus then at Brest, was transferred from Long Island to New York City at this end, the French Government having taken possession of this cable and the British of the other, and under that condition the permit was allowed to be transferred to New York and the French Government made some arrangement with the French cable company to operate that cable. . . .

Well, there was a cable from Germany to the Azores, down the West African coast, that landed at one or two places, and finally at Moravia [Monrovia], Liberia, and thence . . . to Pernambuco, Brazil. That was a transatlantic system from Germany through to South America. That cable has been cut up some. In fact, the German end has been tied onto France and goes down to Dakar, on the West African coast, and the cable from Liberia to Brazil was cut and has never been connected up again. Then there were some smaller cables. There was one cable that went from Constantinople to Constanza, Rumania, and then in the Pacific Ocean there were a few short cables along the Chinese coast which were ceded to Japan, and there was a cable from Guam to Yap and from Yap to the Dutch East Indies, Menado, and one from Yap to Shanghai. Those cables were nominally owned and operated by a German corporation in which Dutch interests had about a one-third interest. It was assumed that it was an interest of one-third, because the Dutch and German Governments subsidized this line at a proportion of one-third and two-thirds, and those cables were cut by the Japanese and are not in operation, except the cable from Yap to Shanghai, which was diverted by

the Japanese from Shanghai to Nabu, a small island belonging to Japan, and that is one of those cables that is now in operation.²⁸

Mr. Davis then went on to develop the fact that the United States had a real and very definite interest in securing direct contact by cable with foreign countries, in the pursuance of which policy he hoped that the confiscated German cables would pass into the control of the United States, there being then in process the formation of a company that was to operate the former German cables, provided, of course, that they would be turned over to the United States by the governments holding them. That, however, has as yet not been accomplished, and the indications are now that it will never be accomplished, so far as the present personnel of the State Department can judge of the situation.

²⁸ CLH, pp. 33-35.

CHAPTER III

CABLE-LANDING LICENSES AND MONOPOLIES OF TRAFFIC

While the United States government persisted in fighting monopolies, and regulating rates downward at home, the American commercial companies operating to points abroad strove for monopolistic concessions wherever they could be had and made as hard a fight for high cable rates as did their British and French competitors, as is shown by a considerable number of contracts here reproduced in their essentials. So far as the American cable companies were concerned this was due to the fact that they were entering upon a field already well posted by the British cable monopolists, to wit: Latin America. The British companies had laid cables to points in Central and Latin America where the chances of getting lucrative traffic were good. The American companies, as a poor second in the field, had to take whatever there was left. They took it in the hope that increase in population and the resulting commercial

and industrial expansion would make their cables pay.

The general situation was such that the Latin American governments, none too particular in the granting of concessions, offered no resistance to the demand for monopolies. These governments, too, wanted good cable communication, and since the giving of a concession was the easiest way of getting them, the American cable companies, ably supported by their government, did not fail in their endeavor.

By that time the Western Telegraph Company, and its subsidiaries, had laid claim to the greater part of the eastern shore of Latin America, with Pernambuco as the general base. From that point, reached by these companies direct from Europe, the Argentine Republic, Brazil, and the West Indies were served, with a land line reaching to Lima, Peru. The British government had done its best to promote the interests of the group known as the "Western Telegraph Company," and the American government, therefore, had to give a like support to its own cable companies, even if the monopolistic concessions that were sought harmonized in no manner with the policy pursued domestically. Little by little, the group now known as the "All-America Cables, Incorporated," and its principal subsidiary, the Mexi-

can Telegraph Company, gained ground. They established themselves firmly in the Caribbean Sea and along the west coast of Latin America. This done, the American company sought profitable connections more to the eastward and found them, while the British company reached further west. However, this was not simply a question of exploiting new fields of submarine communication and of land telegraphy. The fact is that in many instances new lines had to be laid in order to make existing cables profitable.

A keen struggle ensued between the American and British companies, both of which seem to have enjoyed the support of their respective governments. Now and then resort was had to litigation, and in 1916 the All-America Cables worsted the Western Telegraph Company in a suit in the Brazilian courts, in which the federal government of Brazil was the plaintiff.¹ The decision as finally made by the Supreme Court of Brazil rendered void in many essentials the monopoly of the British company to points in Southern Brazil, Uruguay and the Argentine, secured by contract as to cable rates entered into between the Western Telegraph Company and the Department of Telegraphs of Brazil. This decision worked wholly in favor of the All-America Cables, whose con-

¹ CLH, pp. 55-56.

nection to the parts thus freed of British cable monopoly was made possible by extending the submarine line from Valparaiso, Chile, to Buenos Aires, by means of a land telegraph line, and joining thereto the cables of the company reaching from that terminal to Uruguay and the cities of Santos and Rio de Janeiro, Brazil.

The government of the United States, despite its anti-monopolistic policy in regard to cable traffic at home, had meanwhile done its best for the All-America Cables elsewhere. This company, jointly with the Western Union Telegraph Company of America, had made some contracts with the government of Mexico that gave both concerns the cream of the foreign telegraph business of Mexico. Very advantageous agreements had been made with the governments of Salvador and Nicaragua. In Peru a monopoly had been obtained. The cable traffic along the west coast of Colombia was in their hands, and an exclusive concession had been given it by the government of Ecuador.

Speaking on these matters before the subcommittee of the Senate Committee on Interstate Commerce, on December 15, 1920, Elihu Root, Jr., counsel for the All-America Cables, Inc., said:

Now, the attitude so far has been, both on the part of

the British and American lines, that they would get what monopolies they could for themselves and, where it is possible, break up the monopolies of their rivals, and so far the British foreign office has actively assisted the British lines and the American State Department has actively assisted the American lines. It has been a commercial struggle, and we do not blame anybody for having monopolies. We would be glad to have that British north Brazilian monopoly ourselves and they would be glad to have our Peruvian monopoly. It is a question of getting what you can for your country and yourself.

SR. WATSON [Indiana]. Do you look upon a monopoly as a good thing?

MR. ROOT. No, sir; it is probably a bad thing; and I think the agreement, the general agreement, which the communication conference came to, that there should be no new monopolies granted; that they should be allowed to run out — most of the British monopolies and ours do run out in a few years — I think it will be a good thing to get them off the list. . . .

THE CHAIRMAN. Would it not be a good thing if they could get an international agreement that no countries should grant monopolies of this kind and that all monopolies now existing should be abrogated?

MR. ROOT. If that could be made world-wide, speaking for myself, I think it would be a good thing. But I do not think it would be a good thing in South America alone. We are relatively strong in South America. The British are relatively strong in other places — in the Azores, and the East. To have them come to us and propose that there be a mutual wiping-out of monopolies in South America, leaving the rest of the world untouched, would be a very unfair proposition. If they would make

a clean sweep for the whole world, then my feeling is that, whether it would help this company or not, it would be worth while to have it done.²

From a report concerning the eighty-sixth general meeting in London of the Western Telegraph Company, in 1919, we learn that the company in question had been doing a most profitable business, according to Sir John Denison-Pender, K. C. M. G., who said in part:

I do not propose to detain you by going into any details of the figures now before you, which are very fully set out, but comparing the chief items with those of the corresponding period the revenue for this year shows an increase of nearly £498,000. The increase in working expenses, income tax, and excess profits duty accounts roughly for £286,000, leaving a net increase of £212,000. The directors have transferred £450,000 to the general reserve fund, £30,000 in further reduction of the amount of capital expenditure in excess of the share capital and debenture stock issued, £50,000 to the maintenance ships' reserve fund, and £30,000 to the land and buildings depreciation fund. Three interim dividends of $1\frac{1}{2}$ per cent each and a final dividend of $1\frac{1}{2}$ per cent, also a bonus of 2 per cent have been paid, amounting together to £166,344, making a total distribution of 8 per cent, free of income tax, for the year ended June 30, 1919, thus leaving a balance of £37,803 2s. 1d. to be carried forward to the next account. You will observe that although in the report and accounts £450,000 has been transferred to the

² CLH, pp. 53-54.

general reserve fund it has been debited with six hundred thousand and odd pounds, being part of the most of the manufacture and installation of new cables. This fund thus stands at nearly £2,115,000. Now let me ask your attention to the calls we shall have to make on this reserve in the near future. The £600,000 to which I have referred is only a portion of the total with which we are faced in carrying out our program, which I will now lay before you.⁸

Sir John then proceeded to outline the program in question. He spoke of the Western Union Telegraph Company's cable from Florida that was to join the Western Telegraph Company's cable at Barbados, an undertaking that entailed little if any expenditure on the part of the company. The new cable of the company, linking Rio de Janeiro, Brazil, to Ascension Island, had already been laid, and was no longer a financial burden. An old cable between the same points was to be repaired by splicing 1,000 nautical miles into the damaged stretches, while other repairs were to be made on cables along the Brazilian coast. Drawing attention to the fact that the Western Telegraph Company was the holder of all the preferred shares and of 93 percent of the common shares of the West Coast of America Company, Sir John said that the sum of about £1,500,000

⁸ London *Sunday Times*, Dec. 21, 1919; CLH, pp. 59-60.

would be spent on the west coast of South America, in addition to the extensions along the Peruvian and Chilean coasts. Sir John continued:

We are now, therefore, reaping the benefit of the policy which, in the past, has so cordially been approved by the shareholders in building up substantial reserves which are requisite in order to maintain, renew, and increase our plant, and thus enable us to assure a continuance of the prosperity of the company, without having to resort to the issue of fresh capital, which in times such as these could only be done at a very high rate of interest.⁴

The Western Telegraph Company's policy in regard to competition with the Western Union Telegraph Company of America, Sir John described as follows:

The Western Union threatened to go down the coast. We also insisted on going up the coast. Therefore, instead of spending a lot of capital and competing against each other, we made an arrangement by which the traffic will come over our cable and over their cable, and the total rate will be divided between us. That is surely a better arrangement than having them come down the coast and our going up the coast and competing against each other. Now, we shall not have any of our traffic taken away from us, and on the whole I think we have made a thoroughly satisfactory agreement. Mr. [Newcomb] Carlton and myself are satisfied with it.⁵

⁴ *Ibid.*, p. 60.

⁵ *Ibid.*, p. 61.

The above has been reproduced here for the purpose of showing that cable business in the western hemisphere can be a most lucrative undertaking, and that with sufficient foresight it is easily possible to maintain and extend a well-managed commercial cable system. Sir John's reference to the Western Union Company is of especial interest, because there was an unpleasant aftermath to it in the following year, as has been shown, when President Wilson prohibited the landing, at Miami Beach, Florida, of the proposed cable from Barbados, an incident that led to an act of Congress which now defines clearly the powers of the President in regard to landing licenses.

In refusing permission to land the cable of the Western Union Telegraph Company, the Department of State, carrying out the wishes of President Wilson, placed itself squarely on the cable policy expressed by President Grant in his message to Congress of December, 1875,—a policy, by the way, which had been embraced by every president since then. In view of this fact it is of especial interest to note what the policy of United States commercial cable telegraph companies had been. It will be necessary, however, to produce first the terms of the monopolistic concession obtained from the government of Brazil by the Telegraph Construction & Maintenance Company, Limited,

a British corporation. This monopoly seems to have been the precursor of all such agreements. It was granted on April 26, 1873, by Decree No. 5270, of the then Imperial Brazilian government, without consent of the Brazilian parliament.

After referring to the transfer of the contract made between the Brazilian government and Charles T. Bright et al. the agreement specifies where the cables are to be laid, and then grants an exclusive concession in these words:

IV. The term of the concession will be 60 years beginning with the date hereof.

1. During this time no other submarine telegraph line shall be established between any point at which the company may have established stations, pursuant to this grant, and any other point likewise equipped along the entire extension of the northern and southern lines.⁶

The monopoly feature of the agreement made in regard to cables and telegraphs between the government of Mexico and the Mexican Telegraph Company and Central & South American Telegraph Company, on October 28, 1879, has the following character:

ART. VI. During the term of 50 years the Government of the United States of Mexico will deliver and cause to be delivered exclusively to the Mexican Cable Co., in Vera Cruz, Tampico, or any other point of connection within

⁶ CLH, p. 72.

the Republic, all the telegraphic messages for transmission to foreign countries sent over the wires belonging to the Government, or those that for any cause whatever may be under its control and immediate administration proceeding from any point within the Republic situated 250 kilometers⁷ south of the boundary line between Mexico and the United States.

During the term above fixed the Government of Mexico shall not give to any other company the above-named messages nor concessions like those granted by this contract to the Mexican Cable Co.⁸

On December 23, 1880 these terms were further fortified by an agreement between the Mexican government and James A. Scrymser,⁹ in regard to telegraph lines in the republic, after concluding a general contract concerning cable charges dated December 10 of the same year. These charges were far from being the same Scrymser had obligated himself to adhere to in the Act of May 5, 1866,¹⁰ adopted by the Congress of the United States. According to this law, Scrymser and his company were to charge no more than \$3.50 for messages of ten words. The contract made with the Mexican government called for a minimum of \$3.94 for ten words or less from

⁷ 156 geo. miles.

⁸ CLH, p. 362.

⁹ Founder of the International Ocean Telegraph Company, of New York.

¹⁰ CLH, pp. 364-367.

Vera Cruz to Brownsville, and \$2.81 for ten words from Tampico to Brownsville. From both Mexican points to Habana, however, the charge was 72 cents a word, the unreasonableness of which tax can best be gauged by considering that the charge on cables to any other foreign country was 40 cents from Vera Cruz and 28 cents from Tampico, per word.¹¹ Thus, it was demonstrated that monopolies obtained from foreign governments do not of necessity benefit the fellow citizen of the one who obtains such exclusive concessions. The fact is that with each monopoly obtained in the cable field the tolls went up. The weaker the government, the more exacting the terms of the concession seeker and the more costly tel-electrical intercourse for everybody who had to take recourse to it.

By an agreement dated July 11, 1881, the monopoly of the Mexican Telegraph Company was extended to Yucatan¹². The company had been given an exclusive privilege by the government of Guatemala on January 13, 1880, the concession clause of which was the same in all respects as in the company's contract with the Mexican government, including a term of 50 years. The charge per word between any point in the United States

¹¹ CLH, pp. 364-367.

¹² CLH, p. 367.

and the cable terminal in Guatemala was not to exceed 75 cents. But on August 20, 1881, the monopoly was limited to 25 years.¹³

Scrymser, now head of the Central & South American Cable Company, New York, had made on June 5, 1880, a contract with the government of Nicaragua. Its monopolistic provisions were identical with those of the contract with Mexico, and the charge in this case was not to exceed one dollar (American) per word between any point in the United States and the company's cable terminal in Nicaragua.¹⁴ On September 10, of the same year, Scrymser's company entered into an agreement with the republic of Costa Rica, as absolute in its monopolistic provisions as any made by it. Again cable tolls went up, being fixed at \$1.25 U. S. currency per word, to and from the United States from the company's terminal in Costa Rica; 55 cents to and from Panama; 30 cents to and from Nicaragua; 60 cents to and from Guatemala; \$1.15 to and from Mexico, and 35 cents from the east coast of Costa Rica to Aspinwall.¹⁵

On August 25, 1879, there was made an agreement between the United States of Colombia and Fralick, Murphy and Co., of Philadelphia, Article

¹³ CLH, pp. 368-370.

¹⁴ Ratified by Nicaragua Feb. 23, 1881.

¹⁵ Ratified by Costa Rica Jan. 11, 1881.

III of which provided that "the Government of . . . Colombia agrees not to establish, nor authorize the establishment of any telegraphic submarine cable running south of Panama during the period of 25 years." Like all similar contracts this one provided that "the telegraphic enterprise to which this contract refers, being one of public utility, shall be exempt from duties and taxes of any description either national or of the States," i. e. those of the Colombian federation.

The schedule of tolls agreed upon between grantor and grantee of the monopoly was a most lucrative one. The following maximums per word were set: Panama to Buenaventura, 60 cents, Colombian currency; Panama to Guayaquil, \$1.25; Panama to Payta, \$1.60; Panama to Callao, \$2.00; from Buenaventura to Guayaquil, 80 cents; to Payta \$1.00, and to Callao, \$1.75, the result being that a message to the United States from Colombia was now subject to a tariff that was supplementary.¹⁶ On July 13, 1881, this contract passed by purchase into the ownership of the Central and South American Telegraph Company, which on September 17 of the same year procured from the government of Nicaragua a concession, superseding one of January 10, 1880,

¹⁶ The original concession was ratified on Oct. 25, 1879. The terms as given in the text are those of a modification made in Nov. 29, 1880, and ratified March 15, 1881; CLH, pp. 375-376.

Article III of which provided that "the Government of Ecuador binds itself not to establish, nor to allow to be established, telegraph cables on the coast of Ecuador during 50 years." The rate per word agreed upon was \$2.50 U. S. currency, between the nearest station of the company on the coast of Ecuador and any point in the United States; moreover the government was bound to cause its own messages in the provinces and abroad to be turned over for transmission to the cable company in preference to others.¹⁷ On June 15, 1882 the company made a similar contract with the government of San Salvador for 50 years.¹⁸

Fralick, Murphy and Company had meanwhile obtained a monopoly from the government of Peru, which they turned over to the Central and South American Telegraph Company on May 30, 1881. Article IV of this reads: "The Government [of Peru] binds itself not to establish nor allow to be established, during 25 years, any submarine cable running north from Payta or other point on the coast of Peru." The maximum charge per word was to be two silver soles.¹⁹

The field of primary monopolies in Latin America having been exhausted, those interested in the concessions now bent their efforts to get the

¹⁷ CLH, pp. 376-377.

¹⁸ CLH, pp. 410-413.

¹⁹ CLH, pp. 378-379.

maximum production out of them. On November 15, 1897, there was entered into between the Mexican government, Mexican Telegraph Company, and Western Union Telegraph Company an agreement, which provided that "from the promulgation of this contract, and during its existence, the international telegraph service of the Republic can be performed only by the Federal Government [of Mexico], the Mexican Telegraph Co. and the Western Union Telegraph Co." Tolls were revised, slightly downward in the main, though Cuba, for some reason, continued to pay dearly for its cable service. The contract was to be void in case the Western Union admitted a foreign government as partner in the enterprise.²⁰

• Two years later, July 29, 1899, the attempt was made to regulate cable conditions in the Azores Islands as between the Portuguese government and the following: Europe and Azores Telegraph Company (Great Britain), and Commercial Cable Company (United States), in regard to the establishment and use of submarine telegraph cables between the Azores and North America, Great Britain and Ireland, and Germany. This time the major portion of cable communication between the United States and Canada and Europe

²⁰ CLH, pp. 381-387.

was the objective, and, though the Europe and Azores Telegraph Company was represented by a Portuguese, one Carlos Ferreira dos Santos Sylva, it was a strictly British interest that was back of the move.

To the British company was granted "the right to land in any of the Azores islands, and work two direct submarine cables, running respectively, to New York . . . and Canso (Canada), . . . the right to land in any of the Azores islands, and work a submarine cable* connecting with any point of the coast of Great Britain or Ireland, in addition to that referred to in the second part of paragraph 2, article 32, of the contract of the 17th of June, 1893 . . . the right to land in any of the Azores islands and work a submarine cable connecting direct to Emden (Germany)."

The several cables referred to above were to have "in the Azores only one central station common to the same cables, it being understood that no telegraphic administration of any foreign Government shall have the right to have representatives or employees in this station or any other station in the Azores, and that the fiscalization (control) of the service belongs exclusively to the

* The cable in question is the only one now owned by the Europe and Azores Telegraph Company, and links Lisbon to Ponta Delgado and Horta on Fayal island, Azores.

telegraphic administration of the Portuguese Government."

Clause 12 of the agreement conferred upon the Europe and Azores Telegraph Company, with headquarters at Electra House, Moorgate, E. C., London, England (seat of all the principal British cable companies), the right "to transfer, respectively, to the American Co., The Commercial Cable, with seat in New York, the concessions granted by the present contract in relation to the cable from the Azores to Canso and of one of the cables from the Azores to Great Britain or Ireland; and to the German company, Deutsch-Atlantische Telegraphen Gesellschaft, with seat in Cologne, the concessions relative to the second cable from the Azores to Great Britain or Ireland and to the cables from Azores to New York, and from the Azores to Emden, provided these companies accept all the obligations and charges with respect to each of these concessions."

Among these obligations was that "the central station established in the Azores under the exclusive charge of the Europe & Azores Telegraph Co., shall be served as far as possible by employees of Portuguese nationality," the employees of the Portuguese state were to get the necessary accommodation in the stations of the enterprise to receive and distribute local telegrams, or be other-

wise accommodated as the Portuguese government thought best in order to effect communication in case the telegraph stations of the Portuguese government and the combination should be apart.²¹

These and other clauses of the contract left no doubt at all that one of the primary objectives of the move was to establish a monopoly, not of cables, but of supervision of cable messages, for commercial and political purposes. The Europe and Azores Telegraph Cable Company was a British concern, parading in Portuguese garb, with headquarters in the very citadel of British world cable control, and the Portuguese government served simply as a means to an end. So far as the American company was concerned it was simply a question of getting a cable, and the same applies to the German concern.

On August 3, of the same year, five days after the making of the above agreement, the Europe and Azores Telegraph Company transferred the rights secured by it to the Commercial Cable Company, of New York, the agents for the former being Messrs. "J. Denison Pender" (Sir John Denison-Pender, K. C. M. G., chairman of the Board of Managers, The Western Telegraph Company, Electra House, London) and George R. Neilson, while J. W. Budd, a London solicitor,

²¹CLH, pp. 388-394.

signed for the Commercial Cable Company, of New York, said company being represented in person by Albert Beck, secretary, and George G. Ward, vice-president.²²

The Emden-Azores cable was in like manner transferred to the Deutsche Atlantische Telegraphen Gesellschaft, of Cologne, which company had earlier in the same year been given permission by executive order of President McKinley to land the Azores leg of the cable on the shores of the United States.²³ This cable enjoyed no exclusive privileges of any sort; neither did those permitted to the Commercial Cable Company in 1902 for landings in California, Honolulu, Midway Island, Guam, and Luzon for the purpose of reaching China, in 1905, for landings in Guam from Japan, and in 1907 for landings in New York from Cuba.²⁴

Its concession from the government of Colombia, obtained by Messrs. Fralick, Murphy and Company, of Philadelphia, expiring in 1904, the Central and South American Cable Company renewed the same on December 3, 1903, with the monopoly privilege somewhat curtailed and modified, though extended for another 20 years with

²² CLH, pp. 394-395.

²³ May 27, 1899, CLH, pp. 12-13.

²⁴ CLH, pp. 12-16, 18-19, 216-217. The Pacific cables are in the name of the Commercial Pacific Cable Company.

further renewals for periods of each two years in prospect provided that "at the termination of each such period of two years it [the government] has not entered into any contract for the establishment of other means of communication different from that of the submarine cable."²⁵

Thus the wireless began to make itself felt, even if at that time it was still largely an experiment.

The company succeeded also in extending its monopolistic advantages in Peru by means of a contract with the Peruvian government signed on February 28, 1905, the prolongation being for 25 years. The wireless had to be taken into account in this instance also, as follows: "but in case the wireless system should become of general use by commerce in the world, and should substitute in a permanent and normal manner the cable between Europe and Lima, via Buenos Aires and Chile, and if the Government should receive proposals to establish it between Lima and Panama, the Government has the right to require the company to decide within the period of six months whether or not it will establish for its account the said wireless system."²⁶

Negotiations between the government of Ecua-

²⁵ CLH, pp. 413-416.

²⁶ CLH, pp. 418-420.

dor and the Central and South American Cable Company led to an extension of the latter's exclusive concession by fifty years in 1906. But again the monopoly underwent modification, first by the prospect that the wireless might take the place of the submarine telegraph, and, secondly, through the Ecuadorian government feeling itself no longer entirely at the mercy of the cable company.²⁷

The anti-monopolistic policy of the government of the United States, in so far as cables owned by foreigners were concerned, continued meanwhile. There can be no doubt that in the main this policy was highly inconsistent. President Grant had announced a policy and had himself lived up to it. His successors were less fortunate in that respect. While James A. Scrymser and Fralick, Murphy and Company reached south and obtained cable monopolies all over Latin America, and strung them to their cable connections out of the United States, for which cable landings had been obtained with the understanding that there were to be no monopolies, the government in Washington was ever on the alert against issuing cable landing licenses to foreign companies tainted in any way with monopolism. By and large it was a ludicrous proceeding, of course. It led, however, to the

²⁷ CLH, pp. 424-426.

desired result — as that result was made apparent by a lowering in cable tolls. In this scratching for cheap cable rates the wider commercial, and political significance of a broader cable policy was neglected entirely. Only such cables could come into the United States from Europe as had no difficulty in showing that they were not monopolistic, and since this was ever coupled with complications it was the clever rather than the honest promoter of submarine telegraphs who had the ear of the court.

Rate wars ensued between the companies competing for United States traffic, and in them the British companies had always the advantage, with the result, of course, that they got the better part of the bargain when pools between the cable concerns were formed. Thus we find that in the pool made by means of an agreement dated September 24, 1880 the French company had to take what was offered it. The parties to the pool were: The Anglo-American Telegraph Company, as the owner of four but operator of three transatlantic cables between Valentia, Ireland, and Heart's Content, Newfoundland, one of them being out of repair just then, and further as the owner of a cable from Brest to St. Pierre and Duxbury, of a submarine and land line from Heart's Content to North Sydney, and the lessee of a cable from

Brest to Salcombe; the Direct United States Cable Company, as the owner of one cable from Ballinskellig Bay, Ireland, to Torbey, Nova Scotia and a cable from Torbey to Rye Beach, New Hampshire, U. S. A.; and the Compagnie Française du Télégraphe de Paris à New York, as the owner of a transatlantic cable from Brest to St. Pierre, of a cable from St. Pierre to Cape Cod, of a cable from St. Pierre to Louisburg, as user of a cable from Brest to Penzance, and owner of land lines from Cape Cod to New York, Cape Cod to Boston, and Louisburg to Sydney. The pool was a very onesided affair. The two British companies received 84 percent and the French company 16 percent of the common receipts of the combination. This unbalanced division was due to the fact that behind the two British companies directly concerned lay the power and resources of the Western Telegraph Company and the Eastern Telegraph Company, and those of their other subsidiary concerns, in addition to the strong and perfectly logical argument that the British cable trust was in control of nearly all the tributary cables that fed the transatlantic lines.

On the other hand, as shown by the minutes of the annual meeting of stockholders of the French company, held on May 11, 1881, the contract made between the pooling lines had a most bene-

ficial effect upon the treasury of the company, despite the fact that cable tolls had been reduced from 3.75 francs to 2.50 francs per word. The reason for prosperity lay in the circumstance that there had been a remarkable increase in traffic, amounting for the first four months of 1881 to 57.08 percent. Fear of competition had kept cable rates high and traffic scant.²⁸

The case proved that the attitude of the government of the United States had been an eminently sound one from the dollar angle. On the other hand, the British cable trust was now more than ever supreme.

On August 15, 1881, Jay Gould's cable company, the American Telegraph and Cable Company of New York, opened its transatlantic lines with the announcement that its toll would be 35 cents a word, as against the English two-shilling and French two-francs-fifty rates. The company had the Western Union behind it, and that meant that most of the cable business originating away from New York and other seaboard towns would be diverted into the cable of the new concern. The Anglo-British pool reduced its rate fifty percent, and thus undercut the American company a trifle. A few hours after the opening of the service the cable of the American company snapped, an inter-

²⁸ CLH, pp. 450-453, 457-461.

ruption of many months' duration of the service resulting.

This period of grace was used to negotiate for a new combine that was to include the American company. The first agreement was made between the Anglo-American, the Direct United States Cable, the French, and the American companies, on the basis that, as soon as the cable of the latter should be in operation, proceeds from the joint business should be divided as follows: $87\frac{1}{2}$ percent to the European, and $12\frac{1}{2}$ to the American participants, with the further understanding that as soon as the American company should have two cables in operation the proportions should be $77\frac{1}{2}$ and $22\frac{1}{2}$. The second or supplementary agreement regulated matters in regard to the transmission by the pooled cables of messages received from, and for, land lines operated in the United States. Meanwhile, the old two-shilling rate was to be restored. To these agreements were party: The Anglo-American Telegraph Company, Ltd., The Direct United States Cable Company, as British members; the Compagnie Française du Télégraphe du Paris à New York, French; the American Telegraph and Cable Company, the Western Union Telegraph Company, the Atlantic and Pacific Telegraph Company, the American Union Telegraph Com-

pany, and the Franklin Telegraph Company, all of the latter operating in the United States.²⁹

There was now in existence a general trust in regard to tel-electric communication from the United States across the Atlantic or in opposite direction.

It is just a trifle odd that the government of the United States should have directed its first efforts to break up this super-monopoly by addressing itself to the French company, which was hardly more culpable than other members of the combine. Yet such is the case. There was a long correspondence on the subject between the officers of the *Compagnie Française* and the American government, and Congress ordered an investigation, in February, 1883. The proceeding was hinged upon the conditions upon which the French company had been allowed to land its cable on February 9, 1880 "when said company was permitted to land its cable upon our shores [with conditions], to the effect that it would never combine with other companies to raise rates; and further to report the nature of such change and modifications, if any, with a view to Congressional action to prevent the consolidation of rates."³⁰ To an inquiry made by George Walker, then United

²⁹ CLH, pp. 461-473.

³⁰ CLH, p. 438.

States consul general at Paris, Pouyer-Quertier, president of the French company, replied, on December 22, 1882:

We will remind you, Mr. Consul General, that when the French cable was opened to commerce the rate was 3.75 francs or 3s. per word, and that it is due to the establishment of that line that this rate is now reduced to 2.50 francs. The result of our enterprise has been, therefore, an economy for international commerce of 33 per cent upon the former tariffs. We can add that the cable of the company transmits free of charge the messages of the Government of the United States.³¹

Thus the incident was closed.

On the whole the experience of the French cable company in its contact with the United States government does not seem to have been very satisfactory. The government appears to have been ever in the mood of picking the French cables as the vehicle by which to give expression of its cable policy. The English cables were in a better position. Landing on British soil, the messages sent over them entered American territory not as cables but as telegrams and had thus an entirely separate status, as it was viewed. The English cables' business was entirely a British matter, on the one hand, and, on the other, the sender or ad-

³¹ CLH, p. 475.

dressee of cablegrams in the United States could take or leave what was given him with the chances always in favor of those who imposed this condition. The cable was a commodity which the British government could, as "an act of grace," as Sir Edward Grey expressed it later, put at the service of others if it had a mind to do so. The cable heads in the Dominion were not within the jurisdiction of the United States and to be permitted to make use of them was a courtesy at best, as indeed it was and ever has been. The issuance of subsequent cable landing licenses left no doubt as to this. In fact with each succeeding instance of this sort it was made plainer and plainer by the British Board of Trade and the postmaster general that there was no obligation of any sort that could oblige the British government not to please itself entirely in regard to the political administration of cable termini on British soil.

In doing this, the British government did not go beyond the limits other governments could readily recognize. The fact is that sovereignty is absolute within one's jurisdiction. That a means of international communication such as a cable may have a far greater sphere than is kept in mind by the authors of a landing license is something that concerns primarily those who depend upon the cable in question in order to reach the world

beyond their own frontiers. They, on the other hand, have the right or privilege to be equally critical should opportunity present itself for the exercise of such inclination, and generally this is done, as was so amply demonstrated in the case of the Miami-Barbados cable.

The fact is that were the United States government really to live up to its penny-wise cable policy there would be very little cable communication between America and any part of the world. In what concerns Latin America there is actual proof of monopoly. Where the British cables do not enjoy exclusive privileges those of American companies do. It is not much better elsewhere. The entire East is a British monopoly in effect. No doubt the British government and its satrapal governments could be induced to grant landing licenses almost anywhere. However, nothing would be gained by that. After all a cable to be effective must be a commercial reality. How that could be done within the domain of the Eastern Telegraph Company and its subsidiaries in the Mediterranean, in any part of Africa, Asia, Australasia and Australia would be a speculation as interesting as it would be vain.

That the British have succeeded in setting up what may well be termed "world cable control," is not an accident, of course. The field was cap-

tured by enterprise and foresight. No opportunity was slighted, it seems. For instance, during the years that France had difficulty with her German neighbors and was beset by problems at home the British succeeded not only in getting hold of the few French cables that had been laid but they induced the French government to make valuable cable landing concessions to their own companies. It had been the policy of France to have her own cables. That policy had to make room for expediency for a time. But as soon as conditions improved France again returned to her cable policy. Had she been given even slight encouragement the world might have at least two competing systems today. As it is, the French cables are but a poor second, while the so-called American cables are not even that, considering that the transatlantic cables of the Western Union are without exception British and not American property, though being the latter would not change things very much so long as the American cable heads lie on British territory or the Azores islands, which are nominally Portuguese but actually British territory also. To what extent the cables of the Commercial Cable Company are British is hard to say. It is asserted, however, that the majority of the stock of the company is held in the United States. But again we deal with

the fact that it is the British government that issues the landing licenses at home and in Newfoundland and the Dominion and controls the Portuguese island that serve as relay points.

CHAPTER IV

CABLE RELATIONS BETWEEN THE UNITED STATES AND GREAT BRITAIN

The cables reaching the United States through the Atlantic are owned and managed by British, American and French companies. Those giving tel-electric access jointly to the United States and Latin America through the South Atlantic belong to and are operated by British and French companies. Before the outbreak of the late war in Europe two German companies with three cables competed for this business. One of the German cables was taken over by the British, the second by the French, and the third is as yet not allocated so far as its stretch from the African coast to the Brazilian coast is concerned.

Cable connection with Europe, then, depends largely upon other rather than upon American lines. According to the maps shown and statements made by American cable companies such is not the case. Yet an examination of the facts can leave no other conclusion.

Testifying before a subcommittee of the Senate Committee on Interstate Commerce, on December 15, 1920, Newcomb Carlton, president of the Western Union Telegraph Company, of New York, stated that his company was operating at that time eight cables across the Atlantic. Two of them, he said, were leased from the American Telegraph and Cable Company, and had their landings in Newfoundland and Penzance, both of them points under British sovereignty. Mr. Carlton stated specifically that the Western Union did not own the two cables, but leased them, bringing out in that connection that the Western Union operated five cables owned by the Anglo-American Company, a British corporation. These, too, he said, had their termini at Valentia, Ireland, and Penzance, England, and at Heart's Content, Newfoundland. The eighth cable managed by the Western Union was owned by the British government, who had bought it from the Direct United States Company.

The leases of the Western Union, said Mr. Carlton, would expire in 1932, so far as the cables of the American Telegraph and Cable Company were concerned; after 99 years from 1912, in the case of the cables of the Anglo-American Telegraph Company, and upon six months' notice at any time in relation to the cable now owned by the

British government. The American Telegraph and Cable Company and the Anglo-American Telegraph Company are both incorporated under English law, the latter holding its rights and privileges under licenses issued by the British Board of Trade, in the name of the British government, on January 8, 1881, September 30, 1887, and October 13, 1908.¹

On July 22, 1919, the British Board of Trade issued to the Western Union Telegraph Company and the Anglo-American Telegraph Company a new landing license in behalf of the British postmaster general, and the British crown, in which the conditions and regulations under which five of the cables worked by the Western Union are laid down in minute detail.

In the license the government's right of eminent domain is clearly defined; it is provided that charges on messages to Great Britain shall not be higher than charges to any other part of Europe and that to the British government shall accrue all advantages accorded any other government in using the cables, this to be one-half of the tolls charged the public; and then proceeds:

8. (1) The two companies will from time to time furnish to the postmaster general at his request all such

¹ CLH, pp. 117-119.

THE WORLD'S INTERNATIONAL CABLES AND THEIR OPERATORS

(Diagram at the right shows ownership of cables)

NAUTICAL
MILES



■ EASTERN & SOUTH AFRICAN TEL. CO.

Ⓐ Belong to 17 governments, including Germany, 3,314; Indo-European Tel. Dept. of Brit. India, 2,273, and Japan, 1,998.

Δ Belonged formerly to German cable companies.

A1 Cables owned and operated by British; A2 cables owned by British but leased to American operators (are included in American Group); B cables owned and operated by Americans; C—by French, D—by Danes; E—by governments; F—held by League of Nations.

information as to their rates of charge for telegrams over their trans-Atlantic cable system, the extent and condition of the business of their trans-Atlantic cable system, their income, expenditure, and their financial position, respectively, so far as regards such business as the postmaster general may from time to time require: *Provided*, That the names of the customers of the two companies and details of their customers' accounts shall not be included in such information, and that such information shall, except for the purpose of this agreement and such determination of differences as hereinafter mentioned, be treated as strictly private and shall be in no way published or publicly made use of, except as last aforesaid, without the consent of the companies. . . .

9. The two companies, or one of them, will from time to time furnish to the board of trade or to the postmaster general, at their or his request, all such particulars of traffic passing over all or any trans-Atlantic cables for the time being owned or operated by the two companies, or either of them, and originating in or destined for or passing in transit through the United Kingdom as the board of trade or the postmaster general may from time to time require. . . . [Here follows a proviso similar to the one appended to (1) of 8. above.]

14. (1) Inasmuch as, in the opinion of one of His Majesty's principal secretaries of state, an emergency has arisen in which it is expedient for the public service that His Majesty's Government should have control over the transmission of messages by the licensed cables or any of them, or where in the future, in the opinion of one of His Majesty's principal secretaries of state, such an emergency as aforesaid shall have arisen, it shall be lawful for the said secretary of state by warrant under his hand to direct

and cause so much of the works of the two companies or either of them as are within the United Kingdom or the territorial waters thereof or any part of such works to be taken possession of in the name and on behalf of His Majesty and to be used for His Majesty's service and subject thereto for such ordinary service as to the said secretary of state may seem fit; and in that event any person authorized by the said secretary of state may enter upon the offices and works of the two companies or either of them or on any part of such works and take possession thereof and use the same as aforesaid.

(2) One of His Majesty's principal secretaries of state may, during the present emergency and in the future when he considers such an emergency as aforesaid to have arisen, instead of taking possession of the offices and works of the two companies or either of them or any part of such works, direct and authorize such persons as he may think fit to assume the control of the transmission of messages by the licensed cables or any of them either wholly or partly and in such manner as he may direct, and such persons may enter upon the premises of the two companies or either of them accordingly, or the said secretary of state may direct the two companies or either of them to submit to him or any person authorized by him all telegrams tendered for transmission or arriving by the licensed cables or any of them or any class or classes of such telegrams and to stop or delay the transmission of any telegrams or deliver the same to him or his agent and generally to obey all such directions with reference to the transmission of telegrams as the secretary of state may prescribe, and the two companies shall obey and conform to all such directions.

Succeeding paragraphs then deal with the com-

pensation that is to be made to the companies in case there should be financial losses from this interference with their administration of the cables, while further on are noted the conditions that would lead to the forfeiture of the privileges conferred by the landing license issued them.²

Iron-clad and even humiliating as the terms of the above quoted landing license generally are, the Western Union Telegraph Company, of New York, has not been the only American institution that was obliged to accept them or have no contact direct with Europe.

There was granted on December 30, 1919, a landing license to the Commercial Cable Company, of New York, in which the British government, through the same agents as in the case of the Western Union, exacted the identical terms. In fact the two documents are similar in all respects except in so far as there being but one company to deal with the text had to be modified structurally.³

Appearing before a subcommittee of the Senate Committee on Interstate Commerce, John Goldhammer, secretary of the Commercial Cable Company, testified on December 16, 1920, to the effect that his company operated five trans-Atlantic

² CLH, pp. 119-125.

³ CLH, pp. 194-198.

cables, two of them connecting St. Johns, Newfoundland, with Waterville, Ireland, two others stretching from Canso, Nova Scotia, to Waterville, and the fifth from Canso to the Azores, and thence to Waterville. In addition the company operated, said Mr. Goldhammer, two cables between Canso and New York, one running from Rockport, Massachusetts, to Canso, and two others between St. Johns and New York. It will be seen then that the cables of the Commercial Cable Company and Western Union Telegraph Company lie in regard to landing points in Europe (England and Ireland) and in North America (Dominion of Canada and Newfoundland) wholly within British territory, under conditions and in circumstances that make it impossible for either company to do the least thing that would in any manner or form change conditions without due notice to the British government. For instance, should either company desire to lay an additional cable from any part of the coast of the United States to any of the landing points of the company in North American waters or other shores under the sovereignty of Great Britain, it could not do this without securing the consent of the said government, else it be willing to forfeit the privileges secured under its landing licenses.

Mr. Goldhammer then proceeded to point out

that his company had three cables between Waterville, Ireland, and Weston-Super-Mare, in Cornwall, England, and one cable between Waterville and Le Havre, France. These cables, giving physical contact with the continent of Europe, are also within the jurisdiction of the British government, so that in an emergency, such as spoken of in the landing licenses, it would be possible to get over the cables of the Western Union and the Commercial Cables only such intelligence as any British principal minister of state would deem either harmless to, or promotive of, the British public interest and security of state.

In regard to American cable interests in the Pacific the hearing developed the following:

THE CHAIRMAN [Senator Kellogg]. You have but one cable across the Pacific?

MR. GOLDHAMMER. Yes.

THE CHAIRMAN. Is that Pacific cable company owned by the Commercial?

MR. GOLDHAMMER. The Commercial-Pacific is a separate organization which is controlled by the Mackay interests.

THE CHAIRMAN. I want to know whether the stock of that company is owned by other corporations or individually owned.

MR. GOLDHAMMER. It is owned by the Commercial Cable Co. The Mackay companies and Clarence H. Mackay are the stockholders.

THE CHAIRMAN. Is there any English interest in that company that you know of?

MR. GOLDHAMMER. I would prefer, Senator, not to go into that question at this hearing.

THE CHAIRMAN. Are they controlled by the American company, the majority of the stock?

MR. GOLDHAMMER. I think I would like to confine myself to the statement which has already been made as to the stockholders. . . .

THE CHAIRMAN. Are your messages — commercial messages — turned over to the Navy Department in England?

MR. GOLDHAMMER. Yes, sir. I might say, Senator, if you would permit me, that I have a prepared statement which covers all those questions.⁴

Mr. Goldhammer's prepared statement made no reference to British interference with the messages of the Commercial Cable Company, as had been inferred it would, and Senator Kellog, therefore, reverted to the subject in oral examination of Mr. Goldhammer.

MR. GOLDHAMMER. Some reference was made to the European governments directly and indirectly tampering with or delaying messages in transmission for the benefit of their commerce. I would like to say that we never had the slightest reason to suspect that anything of this nature was done. During the war when we were obliged to hand all messages to the authorities for censorship we had no means of telling what use was made of the information

⁴ CLH, pp. 187-188.

contained in the messages, but since the war we have controlled without censorship of any kind the transmissions between origin and destination wherever we had our own offices in England.

In 1919, when British censorship ceased, we were ordered by the British Government to turn over to them all messages passing between our offices, 10 days after they were sent, as explained by Mr. Carlton.⁵

Now that order was given to us, under our landing rights.

Mr. Goldhammer then read Clause 2 of Article 14 of the landing license issued by the British government to the Commercial Cable Company, which is identical in all respects to the same clause of the same article in the British landing license granted the Western Union.⁶

There was inserted in the record of the sub-committee a detailed statement in regard to cable matters by Clarence H. Mackay, president of the Commercial Cable Postal Telegraph Company, of New York, saying in part:

Concerning conditions under which we are allowed to land and operate our cables in foreign countries, England in the past has been reasonable in her requirements for landing cables on her shores but of late she is adopting a more restricted policy such as limiting the duration of landing rights to five years and demanding control over

⁵ President of the Western Union Telegraph Company.

⁶ See above, p. 110.

international rates. France and Germany (and I presume other Continental countries take the same attitude) have reserved with great jealousy their rights to absolute control of telegraph and cable operations within the boundaries of their own countries, and will not allow any private company to open public offices to deal directly with the public and control transmission from origin to destination.

. . . The conditions they impose have the effect of stripping American companies of any advantage which private enterprise may have over Government operated systems. I submit that this is not conducive, but on the contrary is obstructive, to the free development of cable communication facilities between this country and such countries, because, speaking for my company, we can not regard with satisfaction, conditions which confine us to the mere physical landing of a cable, and compel us to rely upon the government telegraph systems to perform the inland operations, and to deal with the public in the collection and delivery of messages. . . .

In Great Britain we are allowed to freely open offices; the British Government leases us wires at reasonable rentals to enable us to connect up our offices in various cities with our terminal stations. . . . Since censorship ceased the British Government has required us to turn over all messages 10 days after they have been sent or received. That is a right which they claim under the landing licenses they issue to all cable companies. What their purpose is I am unable to say, but I would point out that in every other foreign country, because of their control of the inland telegraphs, all messages from America or elsewhere have always of necessity been turned over to the Government telegraph administration for further transmission, and in

this way those countries have always been able to control the transmission of messages. . . . That it is desirable for America to have as many independent lines of communication as possible, I freely admit and indorse, but here again we are face to face with a very practical problem.

The geographic situation of the United States, combined with the electrical limitations in the transmitting capacity of long submarine cables, makes it impossible to lay cables direct to any part of Europe without touching some intermediate point for relay purposes. There is one direct cable now, namely, the French company's cable from Cape Cod, Mass., to Brest, France, (3,173 miles) but it has never been able to compete in point of speed or capacity with the cables via Canada and Newfoundland. There are only three intermediate places in the Atlantic where relay stations can be established, namely, Nova Scotia, Newfoundland, and the Azores. Both Nova Scotia and Newfoundland are under British control. The Azores is Portuguese. From the Azores cables could be paid to Italy, to Portugal, Spain, France, Belgium, Holland, Germany, and probably Denmark. As a matter of improved service, I readily admit the desirability of establishing the most direct cable service, but as a matter of freedom from control, I can not admit that there would be any greater advantage in traversing Portuguese territory or any other foreign territory than British territory, and I say this without any disparagement to any nation.⁷

Before that, Mr. Goldhammer had said that his company, the Commercial Cable, felt "that the United States Government can not go far

⁷ CLH, pp. 265-266, 275-276.

wrong in insisting upon all foreign Governments giving reciprocal privileges in their country to privileges granted to foreign companies in the United States."

It was in connection with this that the question of the "via," or routing of cablegrams came up.

THE CHAIRMAN. Speaking about the Azores situation, I don't know as I understood you. Prior to the war were all of your messages destined for South American points transported between the United States and the Azores over the German cable?

MR. GOLDHAMMER. No, sir; over our own cables between Canso, Nova Scotia, and the Azores. . . .

THE CHAIRMAN. You did not hand over that business to the German cables?

MR. GOLDHAMMER. Not at New York, but we were nominally obliged to do so under our contract with the German Cable Co. at the Azores. . . . Our contract called upon us to do that. But as I explained, in actual practice instead of passing this traffic through the hands of the German Cable Co., to be handed in turn to the Europe & Azores Co. we handed it direct to the Europe & Azores Co. ourselves, and accounted for it to the German Cable Co.

THE CHAIRMAN. The Europe & Azores Co. transferred its rights to South America to the Western Co., did it?

MR. GOLDHAMMER. I do not know that the Europe & Azores Co. ever had any rights to South America; that is, to lay cables to South America. I believe that the original concession that was granted to the Telegraph Construc-

tion Co. also provided for the laying of a cable between the Azores and South America, but that cable, including the cables between the Azores and the United States, and the Azores and Europe, had to be laid within three years after the concession was granted to the Telegraph Construction Co., and that was never done. So that we assumed that the concession expired by effluxion of time.⁸

THE CHAIRMAN. But as a matter of fact the messages which went to South America went over your line to the Azores, and over the Western line [Western Telegraph Company's cables] to South America?

MR. GOLDHAMMER. After the Western Telegraph Co. laid their cable there; yes, sir!

THE CHAIRMAN. And you were compelled to turn those over to the German company?

MR. GOLDHAMMER. Exactly; yes, sir.

THE CHAIRMAN. And as a matter of practice you turned them over to the Europe & Azores Co.?

MR. GOLDHAMMER. Yes, sir.

THE CHAIRMAN. Then that company must have turned them over to the Western company?

⁸ The facts here germane and dealt with are these: On July 29, 1899, the Portuguese government issued to the Europe & Azores Telegraph Company a landing license for cables connecting with the Azores: Canso, Great Britain, New York and Emden, Germany. The negotiator for the Europe & Azores was a Portuguese gentleman by name of Carlos Ferreira dos Santos Sylva. The text of the license shows that all parties thereto knew what disposition was to be made of the cables authorized. (See above, pp. 59-60.) On August 3, same year, the privileges obtained under the license were transferred by Sir John Denison-Pender, president of the Western Telegraph Company, to the Commercial Cable Company, whose vice-president, George G. Ward, transferred the privileges intended for the German Cable Company to the latter on the same day, by means of a document (CLH, pp. 202-210) that leaves no doubt as to cable control on the Azores and throughout the world generally. The arrangement assured that cables between the United States and South America and Germany passed through the hands of a British concern.

MR. GOLDHAMMER. They did; they turned them over to the Western company, first at Lisbon, Portugal, between 1900 and 1906.⁹

Further on in the hearings, Mr. Goldhammer testified, after having described the relations between the Commercial Cable Company and the All-America Cables, Inc., that "all the traffic that we collect in the United States which can be handled by the All-America company we transfer to the All-America company in New York, and such traffic which they cannot handle in the northern part of Brazil¹⁰ we send to London and turn over to the Eastern Telegraph Company."¹¹

Questioned by Senator Kellogg in regard to the employees of the Western Union, Mr. Carlton, president of that company, stated:

In passing let me remark that Great Britain is practically the only nation in the world that has turned out cable operators; so that wherever you will go you will find British subjects operating the cables. This fact negatives the idea in many people's minds that American ownership guarantees secrecy regardless of who operates the cable. There is a great deal of humbug about this talk of violating secrecy of cable messages.

THE CHAIRMAN. Are your cables to the United States operated by British operators now?

⁹ CLH, pp. 198-201.

¹⁰ Owing to the monopolies held by the Western Telegraph Company.

¹¹ The Eastern Telegraph Company is the parent of the Western Telegraph Company, over which it exercises control. CLH, p. 211.

MR. CARLTON. Yes, sir; I presume that 95 per cent of our cable employees are British subjects. They are practically all British subjects.¹²

Reverting to this subject later, at the suggestion of Senator Kellogg, Mr, Carlton said:

I have heard a great deal of that, of course, and I have had a man in South America investigating it. I have had a man in Norway, Sweden, and in Holland investigating it, and I want to be very careful in what I say about it, because I might be misunderstood.

THE CHAIRMAN. I do not care to press you for anything that you do not like to state.

MR. CARLTON. No; I want to talk about it. I think it ought to be talked about. I think it is one of those things that had better be talked about. I believe that all foreign countries used the censorship during the war to enlighten merchants, and that the merchants profited thereby, and I believe that as a resultant of the censorship there may have been a lap over; that there were some unfair advantages gained abroad. Of course, the censorship kept on a long while after the armistice, if you remember.

I was in Holland this year and had considerable to do with the Dutch Government, and I heard a great deal of complaint from Scandinavian merchants, and from Dutch merchants, and I saw some things which purported to be evidence that messages had been delayed in order that the local merchants might have an advantage over the foreign merchant.

¹² CLH, p. 108.

THE CHAIRMAN. You mean the British merchant or the French merchant?

MR. CARLTON. I am speaking now of all foreign countries. If I thought that that situation was ingrained as a permanent method of connecting cable companies, especially British, obviously, we could not afford to have anything to do with them because the first principle observed by all American companies — and I know of no exception — is the absolute secrecy of the telegraph and the cable message. I do not believe there is any Government policy back of what is complained of; I am sure there is not. My answer to a charge that cable messages were being improperly disclosed, would be a moderate amount of diplomatic representation and then a gunboat.

Mr. Carlton then stated that in regard to South America he had found some substance relating to complaints that cable messages were turned over by governments and companies to friendly mercantile interests, but that during the days of censorship "we did exactly the same thing," the expression being general and not intended to designate his own company. He agreed with Senator Kellogg that messages did leak out and that delaying them was as bad as divulging their contents.¹³

Later the following developed at the hearing:

MR. CARLTON. I should like to ask Mr. Root¹⁴ a question.

¹³ CLH, pp. 129-131.

¹⁴ Elihu Root, Jr., counsel for the All-America Cables, Inc.

THE CHAIRMAN. You may do so.

MR. CARLTON. Do you feel, Mr. Root, that the best interests of American trade and commerce would be served by an American monopoly in South America?

MR. ROOT. Let me take a start in answering that. I think the best thing to happen to American commerce would be for the All-America Cables and Western Union to go in together to exploit that field in opposition to the British, as it was contemplated.

MR. CARLTON. And if not the Western Union, the Postal?

MR. ROOT. Yes, sir.

MR. CARLTON. Why not All-America and Postal — why is not that a combination of youth and vigor? The Postal reaches every point where there would be a message for South America, and you would have this splendid system of yours to South America. Why do you want to keep us out of South America?

MR. ROOT. Because, sir, you contemplate diverting to the British lines of South America, to our exclusion, all that vast business you collect over the United States.

MR. CARLTON. Let me remind you — I say this advisedly — there is not a point in the United States where a South American message will originate or be destined to that the Postal Company does not reach.

MR. ROOT. That is all very well for delivery.¹⁵

The subcommittee then took the testimony of Captain F. K. Hill, United States Navy, retired, United States naval attaché and some time censor, at Rio de Janerio, Brazil, from May, 1917 to July, 1920.

¹⁵ CLH, pp. 140-141.

THE CHAIRMAN. While there did you have any complaints of American merchants and business men about their messages being delayed or turned over to British merchants and traders?

CAPT. HILL. I did; many of them.

THE CHAIRMAN. Many complaints?

CAPT. HILL. Yes, sir.

THE CHAIRMAN. Did you investigate any of them?

CAPT. HILL. I did, as far as it was possible under the conditions.

THE CHAIRMAN. Can you name any definite complaint?

CAPT. HILL. I wrote official reports on the subject, and I mentioned the particular character of cases in those reports. One of the most glaring that I remember was the case of a bid for certain electrical goods. At least, the company in the United States was asked by its representative there to submit a bid on a certain definite list of electrical goods, and before the answer came to him the Brazilian who was getting this bid came to the agent of the General Electric man and said, "I have a bid here on the very same articles which you were asked to bid on, from an English company. How did they get that list?" The answer by the General Electric agent was that he did not know. Then a bid was made by the English company which was lower than the American company's bid, but was not accepted by the Brazilian, and he accepted the original bid as it came in first by the General Electric Co. . . . There was one case which was very astonishing to me, which the head of an English coffee firm told me before a lot of witnesses, to the effect that he could get an answer from New York on the same day in regard to quotations on coffee. This was when I was working

under a good deal of pressure trying to get an answer from the Government on very important things, and it required two days to do the same thing over the same lines, English lines. . . .

THE CHAIRMAN. Other commercial messages were being taken by these cable companies and turned over to British traders?

CAPT. HILL. That is what was stated.

THE CHAIRMAN. The same as to the French and the others?

CAPT. HILL. I never heard any complaints of the French. It was always the English that were complained of, so far as I know. . . . Here is the head of *Expresso Federale*, who made a complaint to me that his cables were delayed and suppressed in some cases. . . . With regard to the business of the National City Bank, the information it cabled to its own company with regard to the purchase of property was placed in the newspapers, and the head of the branch of the bank in Rio de Janeiro stated to me that there was no other possible way of the information getting into the newspapers except through the cable company. . . . In addition to that — it is not very nice to tell — but during the war the English naval attaché showed me sheafs of cables furnished him by a friend in the office. I saw those with my own eyes.

MR. CARLTON. Was that during censorship?

CAPT. HILL. Yes.

MR. CARLTON. You do not know whether the same thing went on in this country when we were censoring cables?

CAPT. HILL. I do not know anything about that; but that had not anything to do with cable censorship. The cable censorship was all under me.

MR. CARLTON. Of course, the British were censoring South American cables.

CAPT. HILL. Not there; not officially.

MR. CARLTON. No, they were not doing it there; but all messages destined to the United States had to go to the English first.

CAPT. HILL. Not at all; that is not the question. This is a question of Rio de Janeiro. . . . These messages were deposited in the office . . . and were furnished by an employee of the English line to the English naval attaché in Rio de Janeiro. . . . There was no official censor in Rio de Janeiro, except the Brazilians and the American officers, five of them under me.

MR. CARLTON. That is quite a usual method of censoring.

THE CHAIRMAN. I have no doubt of it.

CAPT. HILL. It is quite unusual, I should think.

THE CHAIRMAN. Do you know, Mr. Carlton, whether it is true that all the messages sent over the British post-office lines are now turned over to the naval department of Great Britain?

MR. CARLTON. As I recall it, after a message has been in our office for, I think, 10 days, to give it a good start so there can not be any question about it, that message in its original form — 90 per cent of them are in code — is taken to, I think, the naval intelligence bureau. They hold them not more than a few hours, three or four or five hours, and then return them. They do not hold them long enough for anything like deciphering. We complained to the British Government that while we did not challenge their right nor their intention —

THE CHAIRMAN. You did not challenge their power?

MR. CARLTON. No; we did not challenge their power.

We thought it would be misunderstood and we thought it was a source of irritation to American cablers. They replied that they wanted those messages only for such supervision as might give them an inkling of pending disorders within Great Britain, I assume having to do with Irish unrest, and also to do with the bolshevik propaganda.

THE CHAIRMAN. Why is it necessary for every commercial message sent by an American merchant and business man over American cables and British land lines that the British government should have them turned over to it? You do not justify it?

MR. CARLTON. No, I do not justify it.

Mr. Carlton then proceeded to explain the position of the British government as influenced by its sitting "in the center of this vortex," in which he was interrupted by Senator Kellogg:

THE CHAIRMAN. Every message that we send to any government, according to that, is turned over to the British and naval authorities?

MR. CARLTON. I believe that diplomatic messages are excepted.

THE CHAIRMAN. You believe they are?

MR. CARLTON. I believe they are; I do not think they are delivered.

THE CHAIRMAN. I will find out from the Secretary of State about that.

MR. CARLTON. I do not think he knows; he will have to ask us.

THE CHAIRMAN. Do you know?

MR. CARLTON. Yes; we do know; that is my impression. But I can find out exactly what goes on.

CAPT. HILL. I happen to know, if you will ask me the question.

THE CHAIRMAN. I will, in a moment. I would like to have your information as to whether our diplomatic messages are all turned over to the British Government — I mean our messages to other governments.*

MR. CARLTON. Very well.

THE CHAIRMAN. What were you going to suggest?

CAPT. HILL. I say, I happen to know, if you will ask the question.

THE CHAIRMAN. I ask you that question now.

CAPT. HILL. They are not supposed to touch anything at all in the way of a diplomatic message from naval or military attachés, or from the ambassador or minister, as it happens to be.

THE CHAIRMAN. In other words, they are not supposed to be turned over?

CAPT. HILL. No.

THE CHAIRMAN. Do you know whether they are actually turned over?

CAPT. HILL. Ah, I do not know anything about that. I do not suppose they are.

THE CHAIRMAN. You do not suppose they are?

CAPT. HILL. I do not suppose they are. They are all in code.

THE CHAIRMAN. There is not any code that can not be deciphered, that I have ever heard of. . . . [to Mr. Carlton] Of course, this is something you can not prevent,

* It must be understood that the United States Government, like all other governments, does not communicate direct with foreign governments, but instructs its ambassadors, ministers, or other diplomatic representatives to negotiate with them.

the turning over of these messages? Is it anything you can prevent?

MR. CARLTON. No; we can not prevent it. We took rather a firm stand about delivering them. We said that we would not be responsible for receiving and delivering messages destined to the United States unless we are certain that they are uncensored, so far as their contents are concerned, and we would prefer to shut down our cables as a protest if this thing was being done surreptitiously. We could not put it much stronger than that. . . . And I went so far as to instruct our vice president in London not to deliver the messages to the British Government and see what would happen. The British Government then explained exactly what they did with the messages; they gave us their assurance that the messages would not be deciphered; the reason was they wanted to keep general track of who was cabling; and, furthermore, they guaranteed that no information of any kind would be issued. And they challenged us to produce a single instance where such information had been issued. We have so far been unable to find a single instance, and I think they have kept their word absolutely.¹⁶

Senator Kellog had made up his mind to get at the bottom of British interference with American cable messages and throughout the hearing he kept this major point in mind — for a major point it had become.

Among others who testified as to this aspect of cable relations between the United States and Great Britain was Norman H. Davis, under-secre-

¹⁶ CLH, pp. 182-186.

tary of state. Speaking in connection with the monopoly enjoyed in Brazil by the British cable companies, Mr. Davis said:

They have exercised their power, I feel, very unadvisedly at certain times, and it is a matter of considerable concern to us. During the war the British western cable, or this Western Cable Co., refused to receive from the Central and South American Co. at Buenos Aires our Government cable dispatches sent to Admiral Caperton's fleet at Montevideo, and as a consequence of their refusal to receive such war messages, all of our telegrams had to be transmitted from Buenos Aires to Montevideo by the German telephone company.

MR. CARLTON. Excuse me, I do not represent the Western Co., but to state that the Western Co. refused to handle on its merits a United States Government message from Buenos Aires to Montevideo, with all respect to you sir, is absurd. No such thing could ever have happened. There may have been a difference; there may have been some kind of a row on the part of the All-America in which they wanted an exchange of traffic, but that you should pick that out and make it a subject of such criticism is not fair. You should take it out.

MR. DAVIS. I will not take it out because this was an official dispatch from our ambassador to Argentina. . . .

THE CHAIRMAN. Mr. Carlton, as I recollect, when you were on the stand here a couple of weeks ago or so, you made the statement that all commercial messages were turned over to the Navy Department of Great Britain but that you did not know whether that included Government messages or not. I would like to know whether that does include Government messages or not.

MR. CARLTON. If you do not mind I would like not to answer that. I would like to explain why I do not want to answer. It puts my company in a very embarrassing position with the British Government. We have large affairs with the British Government, and with various departments who treat us with consideration. I was made to appear at the last hearing as being something of an informant; that I had informed this committee. . . .

THE CHAIRMAN. I can not see any objection to the statement as to whether they were or were not turned over.

MR. CARLTON. Because, Mr. Chairman, a categorical answer would leave a false impression of what is done. . . .

THE CHAIRMAN. Mr. Carlton, if you would just as soon answer that question, I think I shall insist upon it. Of course, you may answer it or not as you please, and you may make any explanation you desire about the reasons why you turned the messages over. I think we ought to know whether they are turned over or not.

MR. CARLTON. I think on the Chairman's insistence I must answer the question, although I do it reluctantly.

I must first describe what takes place. It appears that the British Government was desirous of supervising in and out cable messages to certain European countries in the interest of British peace and quiet. In order to avoid an appearance of discrimination against these European countries, they decided to take charge, physical charge, of all in and out cable messages from every country, and they therefore adopted the plan of waiting 10 days, that is, to give 10 days between the handling of the message and the time that the government called at the cable offices for the messages. The messages were then placed in large bags, sealed I believe, and put in wagons. Those wagons were

driven away under the custody of the Admiralty, and lodged over night in a storehouse and returned to the cable offices the next morning. So that they were kept — they had actual custody of the messages but for a few hours, and so far as the United States messages were concerned, only as a matter of form to make the custom uniform for all countries. We have further investigated and are satisfied that during that period not a single message, commercial, diplomatic, or otherwise, has been actually handled by the Naval Intelligence Bureau, and that their contents are unknown to the British Government because of that fact.

THE CHAIRMAN. Did you ever notify the American Government that their messages were being turned over to the British Government?

MR. CARLTON. I wrote to Mr. Davis — he will have my letter. I have not a copy. I told Mr. Davis that the messages were being turned over to the British Government after ten days, and that they were being kept but a few hours. I think you will recall that, do you not?

MR. DAVIS. Yes, but I understood that letter spoke of commercial cable messages. It did not speak of our own messages.

It was then stated by Mr. Carlton that his company had “no commitment to give any notice of any kind to the American Government or to any other Government,” and that the messages transmitted by his company were “subject to the provisions of our landing license which entitled the British Government to do most anything they want to do, or which they think is necessary to do.”

In conclusion, Mr. Carlton once more referred to the fact that in France the messages transmitted by his company were handled by the office of the government telegraph administration and were, therefore, subject to scrutiny also.

Mr. Goldhammer, secretary of the Commercial Cable Company, was then again examined. He stated that what Mr. Carlton had said described the facts in the case.¹⁷

There had been filed previously with the subcommittee a statement by the All-America Cables, Inc., as to their views in regard to cable conditions in the Western hemisphere. In it was pleaded the cause of an American corporation against that of a British corporation, rather on the basis of the pot calling the kettle black. The statement dwells extensively on the fact that the Western Telegraph Company and subsidiaries operating in Latin America are monopolists, without saying much about the Scrymser monopolies gathered for the Central and South American Telegraph Company, as the All-America Cables, Inc., were formerly known.

The statement had been written for the purpose of the "International Conference on Communication," held in September, 1920. Its authors set forth that the All-America Cables, Inc., has an

¹⁷ CLH, pp. 310-314, 317-319.

authorized stock of \$25,000,000 and that it owns 98 percent of the stock of the Mexican Telegraph Company.¹⁸

The statement reads in part as follows:

Our Government has appropriated over three and a half billion dollars for the construction of a merchant marine. We are attempting at great cost in effort and in treasure to seize an extraordinary opportunity, created by the war, to expand our foreign trade and resume the transportation of our own goods in American bottoms. Our chief competitor is Great Britain. We know how ably the British carrying trade has been built up and how strongly it is fortified by the system of British coaling stations and of exclusive British cable communications. We know how ably and persistently and vigorously it is backed by the British consular system and by British diplomacy in all parts of the world. The British are hard fighters, hard traders, and past masters in the art of cooperation between government and commerce. They are within their rights. It is no reproach to them. But if we are to compete with them, ships alone will not avail us. We must use the methods which they use. As long as they back their commerce and communications by legislation and by diplomacy we must back ours by like means. As long as they seek to set up monopolies we must attack those monopolies and seek to procure like monopolies of our own. It may be true that communication and commerce would be better all the world over if international cooperation could in the future take the place of the present struggle for exclusive rights. But that must come, if

¹⁸ CLH, p. 93.

it is to come at all, by convention, consented to and loyally adhered to by all interested states. The British Government uses its right to grant or withhold landing licenses as a lever to restrain and control foreign cable lines in the interests of its own commerce. While it does so, we should use our like right in the same manner.

Let us repeat. The landing of the proposed Brazil-Barbados-Miami [Florida] cable is a step in a plan to preserve for Great Britain a monopoly of cable communication on the vast and wealthy eastern coast of South America. The landing of that line, whether the proximal end is owned by an American company or not, must be prevented until that British monopoly is surrendered and free entry on even terms is granted to American lines. . . .

Unless there is a general surrender of monopolies by all parties to the conference, the existence of American monopolies on the west coast of South America should not weaken the Government's effort to break up the British monopoly in Brazil.

It has been argued that the Government of the United States should not concern itself with the destruction of the British monopoly in Brazil because All-America Cables (Inc.) itself has monopolies on the west coast of South America. It is true that All-America Cables (Inc.) has monopolies on the west coast, but this fact does not lessen the injury which will be done to American commerce and American diplomacy if they are to be denied communication with northern Brazil except over British lines. . . . We must either fight with every resource diplomatic and commercial against the preponderance of British communications wherever encountered or we must give up all hope of making headway against it.

If Great Britain, suffering a change of heart and as a

party to some great general treaty, yields up her exclusive rights throughout the world and calls upon us to yield ours, that will raise a different and a very great question not to be discussed in this memorandum.¹⁹

¹⁹ CLH, 87, 91.

CHAPTER V

THE RADIO IN INTERNATIONAL COMMUNICATION¹

The first wireless message was sent across the Atlantic and successfully received in 1901, two years after Signor Guglielmo Marconi had brought three sets for radio transmission to the United States for the purpose of reporting the international yacht race between the *Columbia* and the *Shamrock*. The experiment being a success — for an experiment radio still was in those days — the United States naval authorities placed at the disposal of Mr. Marconi four naval officers and three vessels, and established a shore station at Highland Lights. The vessels equipped were the battleship *Massachusetts*, the cruiser *New York*, and the torpedo boat *Porter*.

Rapid progress has been made in wireless telegraphy since then — often in the face of great obstacles. As was ever the case with innovations of a basic character, the radio was not free from

¹ For most of the information contained in this chapter the author is indebted to technical experts in the U. S. Navy Department.

disappointing features, due largely to the general public having been led to expect too much of it. Little was as yet known of the medium used in this system for the transmission of signals, the element referred to as ether — the very existence of which has always been, and still is, the subject of controversy among physicists. Here, as in many human endeavors, it was practice and experience that had to be relied upon. When the first radio signals were sent, and for a good many years thereafter, the activity of all stations had to be suspended as soon as one wanted to send or receive. The several waves came into conflict and a hopeless jumble of fragments of signals would be the result. The "static," too, was not as well understood as it is now, though it must be said that little headway has been made even today in overcoming this condition. Now as then the peculiar atmospheric conditions prevailing in the tropics, caused by sun heat and water storing up tremendous loads of static electrical energy, lie like an insulating belt over the tropical regions of the earth and form at times an impenetrable wall. Powerful radio stations may pierce this obstacle, but to others it is a barrier always. It is well to bear this in mind when radio communication between North and South America is discussed. Trans-equatorial

wireless telegraphy has a number of problems of its own, and they are no mean ones.

In considering the radio as a means of international communication it must also be remembered that in its case, just as in the case of land and submarine telegraphy, we deal with peace conditions and with war conditions. Just as the cable termini must of necessity lie at points separated by political boundaries, in what concerns international communication, so do the stations of the wireless lie in territories under the sovereignty of independent governments — with whom we may be at peace today and at war tomorrow. Those who have not sufficiently occupied themselves with this question are likely to look upon the radio as the cure-all for the ills of international communication, and thus lull themselves into a false sense of security. The telling fact is that the wireless, as well as the telegraph, be this on land or subaquaceous, depends, internationally, upon the goodwill of our political neighbors.

The radio message can be "wiped" out. During the recent war a great deal of this was done, the "wiping" consisting of sending broadcast waves strong enough to overwhelm whatever weaker wave there was about, the result being that the station intended to receive the message failed in this. Such interference is entirely a matter of

liberating from a powerful station in the locality in question waves strong enough to fill, and keep in agitation, the strata of ether necessary to the transmission of messages from and to stations of less power. What the cutting of a cable is to submarine telegraphy, interference such as here described is to wireless telegraphy. There is nothing at the present time that could prevent this being done; in fact such interference could be set up anywhere and kept up for an indefinite time, so that for months all wireless communication would be suspended.

There seems to be little substance to the thought that finally this, too, could be overcome by refinements in the art. We have, however, even now ample indication of a condition that has ever recurred in the field of national defense and international communication. Every refinement leaves a weakness, and today already the wireless system of telegraphy and telephony is in the stage that the race between armor and gun was in some years ago, when the greater resistance of the steel belt about the warship was constantly being overcome by the greater penetrative capacity of the projectile.

In regard to the radio it must further be said that in times of peace little difficulty is experienced in regulating it domestically and internationally,

just as the land and submarine lines have been regulated in the past.

The first beginnings of the radio were humble enough. Great strides have been made, however, due in large measure to the military necessities of the recent war and the lessons of that war. For instance, the cutting of the German cables by Allied vessels in 1914 obliged the late Imperial German government to rely entirely upon the wireless stations under its control. The significance of this was not overlooked by the government of the United States, and everything possible has been done to develop the naval radio establishment. Today, then, the United States Naval Radio Service, administered by a Director of Naval Communications, has 40 high power stations, capable of working to distances of from 800 to 5,000 miles, and 95 intermediate stations with ranges up to 800 miles. In addition 50 compass stations are being operated. The stations of the last two classes serve the needs of the mariner in times of peace, but one of their functions in war time would be to detect the presence of an enemy fleet. Nearly all of them, then, are located along the Atlantic and Pacific coasts.

The naval radio center of the United States is located at Washington, whence distant control transmitters are used to Arlington, Annapolis,

and Sayville to Porto Rico, Panama, Europe, San Diego, Cal. and Mare Island; thence to Pearl Harbor, Hawaii, thence to Manila, thence to Peking; from Pearl Harbor to Guam, and to Samoa; and from Puget Sound Navy Yard to Cordova and St. Paul in Alaska.

These are the high power circuits. Their first mission is to serve the United States navy and government, but they may be used, and at the present time they are so used, for the transmission of commercial and press dispatches, as are a number of medium power stations, such as those at Boston, Norfolk, Charleston, Key West, New Orleans, the Great Lakes, San Diego, San Francisco, Puget Sound, Seattle, North Head, Marshfield, Eureka and Tatoosh, and Dutch Harbor, Juneau, Ketchikan, Kodiak, Seward, Sitka and St. George in Alaska, with the main circuit of high power stations serving to overcome the greater distances that intervene, as is the case, for instance, with the Puget Sound — St. Paul, Alaska circuit.

About one third of the traffic now carried over the main circuits reaches two-thirds across the Pacific, the other two thirds depend upon relay at Honolulu or Guam or both. Connection with Japan is effected by cable from Guam, where hitherto it has been necessary to deliver wireless

to the Japanese cable station by messenger, this showing what international courtesy in respect of communication can be even in times of peace. This incongruous state of affairs was ended in September of 1922, when the new United States receiving station at Merizo was connected by an overland wire with the Japanese cable station.

The high power station at Manila reaches the stations in French Indo-China and the Dutch East Indies, in addition to the stations at Peking, Shanghai and Vladivostok. During the Arms Limitation Conference a through connection with Japan was maintained, for press purposes largely, by way of Puget Sound — St. Paul, Alaska and the Japanese station at Sapporo. This was discontinued later and at the present time direct radio connection with Japan is confined to the circuit via Honolulu and Iwaki, Japan, by the naval radio, and to Funibashi by the system of the Radio Corporation.

The naval station at Tutuila, Samoa, gives access to the Society Islands and Fiji Islands, from which latter point cable connection can be had with Australia and New Zealand. This route is almost closed at the present time owing to difficulty encountered in dealing with the British in the matter of tolls.

In naval circles in Washington it is feared that

some of the circuits named above will have to be closed in the near future due to a reduction in personnel, made necessary by a cut in naval appropriations. This would to quite an extent hamper a system of wireless on which so far the sum of approximately \$25,000,000 has been spent for plant, and which during 1921 transmitted roughly five million words in commercial and press messages.²

It seems proper and instructive in this connection to refer to the longest line of telegraph communication ever established by the government of the United States, thus identifying the character of such lines. It was found necessary some time ago to be in direct contact with the American naval commander at Constantinople, Turkey. The method adopted was to use the wireless station at Annapolis to reach Paris, from which point a leased land line was used to Coblenz, Germany, then occupied by American troops. From Coblenz messages were forwarded to Vienna by

² During January of 1923 the Washington office of the Naval Communication Service transmitted for the navy 704,804 words and other government departments 237,831 words, making a total greater than 942,000 words. During the first quarter of the fiscal year of 1923 the Service transmitted about three million words for the navy and a million and a half words for other departments. Computed on the commercial tolls rate, the Service earned during the year ending June 30, 1922 a total of \$2,721,000 on account of navy dispatches, and \$1,040,667 on account of other departments of the government. In the same period the Service earned in cash and turned over to the U. S. treasury the sum of \$277,122.42 derived from the transmission of commercial and press messages.

telegraph line, to be thence transmitted to the American embassy at the Turkish capital by wireless. While to the casual observer this may sound most enterprising, even formidable, the fact of the matter is that it was largely a "paper" proposition, favored by internal conditions in Europe and of no value whatsoever in the normal scheme of international communication in which ordinarily the volition of sovereign foreign governments has to be taken into first account.

It is estimated that at the present time there are in operation throughout the world, in addition to 44 high power stations, from 700 to 800 medium and low power shore radio service stations, 8,000 sea-going vessels equipped with radio, and 20,000 amateur stations.

The total annual trans-oceanic tel-electric message traffic is estimated at 500,000,000 words, flowing over about 290,000 miles of submarine telegraph lines, and roughly 135,000 miles of trans-oceanic radio circuits, or less than half the cable mileage.

The theoretical working speed of the submarine cable is 170 words per minute with five letters to the word, or 340 words in duplexed cables; about 2,000 words per hour, coming and going simultaneously, or 48,000 words per day of twenty-four hours. In practice, however, this total averages

about 30,000 words per day in each direction or from 40,000 to 50,000 words in both directions for each duplex cable circuit. These figures show that the cable systems are near their total capacity. The daily traffic between the United States and Europe is estimated at 800,000 words per day, or 300,000,000 words per year, over all cables, and this volume is said to represent sixty percent of the full capacity of the cables now laid and in operation, this, however, includes night periods and holidays.

With only about three years' operation, the service of the Radio Corporation of America claims to be handling 30 percent of all trans-Atlantic tel-electric communication, doing this over seven duplex circuits, that is to say, circuits that send and receive at the same time. Average conditions will permit the sending of 40 words or 200 letters in both directions per minute, or 2,400 words per hour—57,600 words per day—over each circuit. The seven circuits operated are said to have a capacity of 800,000 words per day or nearly 300,000,000 per year, if worked at the full capacity of 40 words without interruption, which would equal the cable capacity employed at the present time. But here again practice clashes with theory. The 30 percent of trans-Atlantic traffic claimed by the Radio Corporation amounts to less than

100,000,000 words per year, according to the best information obtainable. One of the reasons for this may be that in the summer, when the air is generally charged with electricity, the transmission speed of circuits is greatly reduced, often cut in half, in fact; the risk of which increases as the distance traversed increases. Meteorological conditions within the space of from 3,000 to 5,000 miles are hardly ever uniform, a space of such dimension affording ample room for the development of a great variety of weather. The experience is that at such distances there is bound to be encountered during the warm season a mean of resistance uniformly much higher than what is encountered in cold seasons or cold climates; the more favorable one segment of weather, the less favorable the next.

Due to the fact that the cable of the United States government to Alaska, and that of the Commercial Cable Company to the Far East, are often interrupted for considerable periods, owing to most unfavorable conditions on the floor of the Pacific, among others, the formation of corals, the radio has in regard to that ocean been a most valuable re-insurance. The two Pacific cables, now operating, to wit: The Commercial Pacific cable and the Pacific Cable Board line, are said to have a total capacity of 32,000,000 words per

year, while the number of words transmitted by the wireless is estimated at 8,000,000 words per year.

The cost of installing a high power radio station, with range of approximately 3,000 miles varies from \$1,000,000 to \$1,500,000 per station, or twice that amount for a circuit of two stations. The cost of a cable of that length would be about \$7,000,000 under the most favorable circumstances at the present time, including the laying of it, which is estimated at about \$300 per nautical mile. Operating a radio circuit of two stations requires an expenditure of about \$100,000 annually, including pay of operators. The cable can be operated for about \$60,000 a year, so long as no repairs are required. Generally, however, cables need a great deal of attention when in the water from twelve to fifteen years, and with a good repair ship to be kept in commission at an annual cost of about \$500,000, the seeming advantage of the cable over the wireless disappears quickly. A large fleet of repair ships is constantly at work, and during the last fifteen years of its life, ranging from thirty to fifty normally, the cable is not only the cause of constant expense to keep it in repair but long interruptions in its operation ensue. The sum total of these conditions is that the wireless can send messages for about a quarter the

charge made by cable companies. On the other hand the wireless is not yet fully reliable.

During the last three years private individuals and corporations have shown greater interest in the development and exploitation of the wireless than was the case before. To quite an extent this is the result of wireless telegraphy being considered beyond the first experimental stage, though here a very important contributory factor must be taken into account. The radio is handicapped, and will remain so for the time being, by its messages being in no sense secure against violation. The wave fills the ether in all directions and any sort of receiving station, tuning-up, can make a record of the message and put it to whatever use the receiver may make of it. This has discouraged the establishing of stations in the interior of all countries, quite apart from the circumstance that it would be impossible to establish even the veriest fraction of the number of offices maintained by telegraph companies. The receiving of radio messages in any part of the country is one thing, the sending quite another. For this reason, then, any radio system depended in the past, and will depend in the near future, upon the telegraph for transmission from seaboard to inland destination. With the two great American land telegraph systems, the Western Union and the Postal,

operators of extensive cable systems, with which any radio system would have to compete of necessity, it was hardly to be expected that either or both would readily make an agreement for the handling over their land wires to destination of radio messages the transmission of which meant a considerable monetary loss to the cable-telegraph company. In the end, however, the Postal Telegraph Company agreed to relay the radio messages of the Radio Corporation of America, and with this arrangement the problem was at least partly solved.

Since then the radio corporation in question has made remarkable progress, so that today it is second only to the United States government in the number of circuits operated, which, in addition to the naval service already described, manages also eight inland radio stations at principal army posts under the war department. The most important system, however, though some differ with regard to this, is still the British Marconi establishment and its several subsidiaries, the actual status of which it is not always easy to determine. Thus, the French radio company is a Marconi system with about 40 percent of its capital of British origin.⁸ Little is known in regard to the Spanish, Italian and Belgian companies, but

⁸ CLH, p. 346.

it is strongly suspected in informed quarters that they are but a part of the British Marconi company. It is known that the Dutch company is directly controlled by the British Marconi. The German Telefunken company, on the other hand, has the reputation of being independent. The radio system of Japan belongs to the Japanese government and is administered by the naval office. The Chinese government took the view some time ago that wireless telegraphy in China should be a monopoly. It was so declared and the Chinese Communications Company was formed, one half of its stock being taken by the government and the other by the British Marconi. Since then a Japanese station has been established in China, and more recently the Federal Telegraph Company of Delaware obtained a similar concession from the Chinese government for a station at Shanghai of 1,000 K. W., and one station of 60 K. W. each at Canton, Peking and Harbin. This concession had to be obtained with the consent of the British Marconi, the system being today virtually in complete control of wireless communication throughout Asia and Australasia, excepting American and French possessions.

Immediately prior to the outbreak of the war, the British Marconi obtained a number of concessions in South America. The war and its long

duration interfered with the development of the plans, so that it was possible recently to form the Radio Corporation of South America in which the British, French and German companies pooled their holdings, though American capital is said to dominate the combination. The company is at the present time erecting a large station at Buenos Aires and a relay station in northeastern Brazil. Its circuits will include the United States, Germany, England and France.

The French developed their radio system into their colonies during the war, with the station at Saigon, Indo-China, built by the United States navy. Though this station is of 1,000 K. W. it is rated as semi-reliable. It has connections in Cochin-China and Nantes, France. Semi-reliable is also the Dutch circuit from Koetwyk, Holland to Malobar, Java. Both the French and Dutch circuits depend on British stations for relay.

The British Imperial Chain of radio stations extends from England to Australia, Africa and Canada. For the circuits reaching the first two of these relays in Egypt and India are provided. The main home station is located near London. Its messages are relayed by the high power station at Abou Zabal, near Cairo, Egypt, to Poona, near Bombay, India; thence to Utica and Singapore, and finally to Port Darwin and Perth in Australia.

Branch circuits connect Cairo with Bagdad, and Hongkong with Singapore. Wireless communication with Africa is obtained by a circuit to Nairobi, East Africa, with relay at Abou Zabal. At Nairobi relay is made to Windhook, the former German station in West Africa, thence to Capetown. The London station communicates direct with Bathurst in British West Africa, and with Glace Bay, Canada.

Of the lesser radio enterprises in the United States may be mentioned the Tropical Radio Company, maintaining circuits between points in the United States, Central America, Venezuela and certain islands in the Caribbean Sea. The Independent Wireless Company handles mostly ship to shore messages.

The lay mind is likely to be misled by one or two fallacies in regard to wireless, which, while developed in the course of this chapter, require, nevertheless, a little direct reference.

Wireless does not, as many imagine, reach everywhere — at least we seem to be still far from that stage. Such being the case it depends, just like the cable, upon relay, that is to say, reinforcement by a station nearer to the destination of the messages, this being applied by repetition of the messages *en route*. For instance, the sending of a message by radio, from Washington

to Bombay, India, could not be accomplished without the co-operation, at the present time, of the British Imperial Chain of wireless telegraphy stations, on the one hand, or the British Marconi system, on the other. Naturally, the establishment of high power stations across the continent of Europe, via France, Belgium or the Netherlands, thence to Germany, Russia in Europe and Russia in Asia would make the radio systems of the United States independent of the British systems, all the more so if several such stations could be set up in China. And here it should be remembered that these stations should be as close together as possible. While a range from station to station of 3,000 miles, as from the United States to the continent of Europe, is not at all unsatisfactory, it is nevertheless true that a range of 2,000 miles is much more to be desired, simply because the lesser distance of 2,000 miles, adopted as the rule in the British Imperial Chain, reduces greatly the chances of interference by "static" conditions.

For the time being at any rate, international communication by tel-electric means — by the submarine and wireless methods of telegraphy — is still entirely subject to technical limitations. Cables longer than those now in operation are not satisfactory because 2,500 nautical miles of

wire offer so much resistance to the electric current that this length is considered the practical limit by cable engineers; while a radio circuit more than 3,000 miles long is hardly better off when computed on the basis of the annual mean of "static." In both cases the electric impulse encounters resistance, due to the fact that neither the best copper strand, nor the element or condition referred to as "ether" enjoy perfect conductivity. There is inertia in all matter, which condition will continue to engage the attention of the physicist and the electrical engineer. Great advance has been made by the men who developed wireless telegraphy, and we need not be at all astonished should we hear some day that the radio wave can be sent around the world in a practical manner. No doubt, when that day comes we will also be told that national security has thus been greatly reinforced, and the national interest promoted. But in the very glaring light of recent events such statements must be accepted cautiously. What good would it have done Germany during the war had she been able to span the earth with the wireless?

It is not the means of international communication *per se* that secure a country. It is the good use, or bad use, made of them by others and by ourselves that governs the case, primarily.

CHAPTER VI

THE PRESS AND INTERNATIONAL COMMUNICATION

The press has been in many ways the foster mother of the improved facilities of international communication we enjoy today. In addition to pressing ever for new and better land lines and submarine cables, and more recently for wireless connections, and promoting, and when need was, defending the means employed in that respect, news services and newspapers have paid huge sums of money in the form of telegraph tolls. Though the managements of telegraph, cable and radio systems lean toward proclaiming that press matter is rather a nuisance to handle, owing to the reduced rates generally granted, they nevertheless have always been anxious to fill up with enough of it to reach the service saturation point, that is to say, they prefer having their lines and stations under full pressure rather than idle.

On the other hand, the press depends upon rapid tel-electric communication. In the days of

the sailing vessel and the slow mail coach, when telegraphy in any form was still unknown, the public was satisfied with such news as it could get when it could get it. By and large the newspapers were then better than they are now. The writer had more time, with the result that he was able to state all of the case. This he can no longer do. With a new edition ready to roll off the press every few hours, newspaper writing has developed into a dangerous piece-meal business. Today only the morning editions and a few serious afternoon papers make any effort or pretense at being thorough. The catch-penny "afternoon" daily has long ago ceased being a newspaper in the best sense. The few afternoon editions that do not subscribe to sensation-mongering entirely have usually competitors of the yellow sort, a circumstance that obliges them to do likewise. There are moreover, technical handicaps.

The man who writes for an afternoon paper lives by the minute, be he at home or abroad. He is forever catching an edition. That means that he has neither the time to get at the bottom of the things he writes of, nor the leisure necessary to write a complete story in case the attending facts are known to him. Then, too, the editor of an afternoon daily is even more hard on "history" than is his colleague on the morning paper. He

wants speed, "meat" and variety. The very nature of his business obliges him to cram into his few advertisement-freighted news pages a little of everything, with the result that news which does not form directly or indirectly a part of the "big" story of the day is given scant consideration — none whatsoever if the "big" story be really a "break."

This may seem an extraordinary condition in view of the bulk of the large afternoon papers. However, it is easily explained. In the first place all newspapers strive for as much advertising as they can get. It is not the volume of news that determines the size, or number of pages, of any newspaper. The amount of advertising is the sole arbiter. Generally, then, the greater the number of pages, the smaller the percentage of news. An edition with little advertising may be equally divided in respect to news and advertising. One more favored may show the ratio of two to three, while in another even more popular with the advertiser, the ratio may be one to three. Indeed, in large cities it is not uncommon to see twenty percent of reading matter serve as the excuse to hand the public eighty percent of advertising.

The fact is, a daily that has to print fifty percent news and fifty percent advertising can keep on its financial feet only with difficulty, and gener-

ally, a ration of 20 for news and 80 for advertising is necessary before it can be said that the publication is on a firm footing. The 20-80 ratio is the ideal of all publishers.

However, even this is not the whole story. If the edition of a paper have thirty-two pages, only one unit of eight pages, or run, will be kept open throughout the day, to receive such news as may come in. The editorial and magazine pages are made up in the morning and run in every edition in the form then given them. The same is true of the inside pages carrying advertisements. What "news" there may appear on these pages is usually "re-write" material taken over from the morning edition of the same publication, or appropriated from some other morning paper.

The paper, then, is a *newspaper* only to twenty-five percent of its volume; indeed, in the case of smaller papers only four pages are ever re-made in the course of the day, no matter how many editions may be run off.

Of the twenty-five percent in question only about half is news-space. The other half is given to advertising. Again we assume the most favorable aspect of the case. It is not often that the four pages of news space allowed in this demonstration are re-made from one edition to another. Usually only pages one and three are "open" to

accommodate despatches coming in. With the news as diverse as it is on many days, the chances of telling anything in a complete and therefore fair manner are very small indeed.

There may be a great difference between the first and last edition of a single day, but there is but little difference in succeeding editions. In the course of the day new "leads," bulletins and "flashes" have been added to the "big break," or the story converted into a "break" to make the edition a "live" one. From one edition to another the jumble grows worse. Every additional item to the original story has created a new impression, so that the whole mess has to be re-written by an office man for the later editions. His principal effort is to preserve the impression which the first dispatch made upon him. In piecing together the fragments received over the wires he feels called upon to be consistent, and whatever he deems inconsistent goes by the board, even if, from the viewpoint of the author of the dispatches, bulletins and "flashes," or new "leads" and "adds," they be most consistent and essential, in fact indispensable.

Not all of this is done purposely or under conditions that would favor a better course. Newspapers, as any other business, must reconcile expenditure with revenue, and in these times espe-

cially, when machinery, labor and paper are of high cost, it is necessary to practice economy. To keep eight pages "open" all day long is a luxury which not many publishers can afford. To keep the entire paper "open" during the day would take an enormous floor space and technical equipment, and, secondly, about forty percent more in personnel.

The aim is to have "open" as small a number of pages as possible, and play within the scant space allotted to news the intricate game known to the "make-up" man. Dealing with a "big break," that absolute personage will "dump" almost anything that looks unimportant, and the harder he is crowded, the less important items not related to the main "story" will look to him. With the second edition off his hands he will on such a day be guided only by the sledge-hammer effect the dispatches have on his troubled mind. He has no time to read the text of anything. He is guided by the "heads" written by the copy-reader—the very person forever bent upon "dressing-up" a story by means of a heading dangling on the limits of fact or protruding into the realm of fiction.

The final effect of all this is that the reading public diets on first impressions.

That public itself is very busy. Instinctively it turns to either the first or the last column of the

first page, scans the heads, reads in most cases but the first half of any "story," browses about a bit and then falls to perusing the favorite page, be this sports, finance, magazine, or advertisements.

Those who deplore that the editorial page has in recent years lost its prestige and appeal, and that with this decline has vanished the influence of the press, speak of something they know little of. It may be true that the editorial page is no longer the *arbiter mundis* it must have been at one time—in the days of personal journalism—if we are to believe what we are told, but it is certainly not to be denied that the alleged decline of the editorial page has in no wise deprived the publisher or editor of a medium for expressing his inclination, views and necessities. Today he uses his privilege to either "play-up" or "play-down" the news, as he sees fit, and to modify the substance of the item by "coloring" it through the headline written by the copy reader, who knows full well what his employer thinks and wants. It is all a question of how the news is received. A dispatch containing aught that is unfavorable to the policy of the paper may be either purged of its obnoxious features or cast aside entirely, or it may be used to accentuate negatively some aspect that fits into the paper's policy.

Depending upon the newspaper for a consider-

able share of its mental diet, the public has in the course of time taken the same attitude. There are those who claim that in other years this was not the case, and that in this respect the public has deteriorated. The maximum assumption permissible in this respect seems to be simply that, during the years just past, war and the emotionalism of war emphasized a deplorable condition of permanent nature.

It came about that arbitrary distinctions were drawn between "news" and "propaganda." In the first of these categories were classed all items that were admitted to be plain, ungarnished and unvarnished accounts of a fact, or a succession of related facts; the other class was deemed to consist of nothing more than the unwarranted use of a fact towards attaining some objective far beyond informing the public.

On this phase a book could be written without exhausting the subject. The difficulty lies not so much in furnishing an accurate account of what takes place but in having that account favorably received. For instance, though purely a local or domestic matter, involving in no sense a national interest as against the interests of a foreign people, the report that a certain railroad had declared a very satisfactory dividend would hardly get the same treatment in any two papers. A paper

friendly to corporations would in all propriety and good faith add that the business of the company had been lucrative owing to the improved methods in management and operation, one of them being that measures for the security of traffic had greatly reduced costly litigation and heavy damages resulting from accidents. A paper less friendly would not be obliged to state why the affairs of the company were in such good order. It could, and in many cases would, state simply what the dividend was, and leave the reader to infer that here again he had a case of extortion practiced on himself; all the copy reader would have to do to heighten the effect would be to decorate the item with a head like this: "Blank Railroad Company Cuts Melon."

There is quite a difference between describing a fire in the block and a fire in the international scheme of things; though most American editors still assume that the man who can do justice to the local incident can do the same with international relations. This applies also to the distinction between a terrestrial earthquake and the international catastrophe known as war. In the former there is no politics—no side to take except for the victim, while the latter is all a case of passion and prejudice.

It is impossible altogether to keep off thin ice

in writing at home or abroad on matters that are naturally subject to difference of opinion, and are therefore involved in controversy. For instance, the many reports written on the persecution of Jews, Greeks, Armenians, and other peoples in sore straits, have always had the political aspect the reader wishes to give them. The writer on such topics may be perfectly impartial, or do his best to be so; this, however would not compel the reader to receive his story in a similar frame of mind. On the other hand, such a writer would be sure to mislead those of his readers not familiar with the older background of the story. News-writing is not an exercise in history, even if enthusiasts claim that the news article of today is history tomorrow. The journalist, to do his work well, must confine himself to the aspect of the case immediately before him. To the idealist that may seem a rough way of doing things, but generally the idealist is not writing for newspapers, nor meeting the bills of one. The long and short of this is that intelligent journalism is impossible in a country where the general standard of education is low, or where education is as superficial as it is in the United States. With this contention vanishes, of course, the claim made for the press of the United States that it is educational in sum and substance. Of a few papers of small

circulation this is true; of the vast majority of publications this is neither the aim nor the effect. The American editor strives to be entertaining, and in this he succeeds better than his colleague elsewhere.

At the hearings held by the subcommittee of the Senate Committee on Interstate Commerce a great deal was said in regard to making more accessible to foreign papers news reports from the United States, in the belief that this would tend to remove some of the prejudices held against Americans and their country. Primarily, the interest of Senator Kellogg and the State Department's representatives was that thereby would be fostered the commerce of the United States. These men were sure that a flood of American cables to foreign newspapers would establish better commercial and diplomatic relations. The newspaper men who testified before the subcommittee were less convinced of this. They assented to the proposition in a half-hearted manner, but protected themselves by advancing the requisite reservations.

There was much complaint about the selection by foreign papers from the formidable array of American news of such items as lynchings, burnings-at-the-stake, murders, murder trials and salacious divorce proceedings. No doubt, foreign papers

do indulge in this. On the other hand, what does the American editor do in regard to both the domestic and foreign brands of "news" of this sort?

But to the unsatisfactory presentation of news from the United States there is another aspect. And that aspect is fittingly reciprocal.

The one country concerning which the American daily press keeps its public well, even completely, informed is England. Though Canada is so much more our immediate neighbor, we know relatively less of the Dominion than we know of London. We know next to nothing of South Africa, Australia and New Zealand, and practically nothing at all of India. Of the other British domains we simply know that they exist; beyond that they are mere geographic details. The same is true conversely; with the English papers themselves giving but one column to American news to every six columns of English news in the American dailies, the reason being that for the American editor London is the source of all non-American political news, while Washington means literally nothing to the English editor, whose sole concern is in New York and its multifarious affairs.

If that be true of the British empire how much more is it justifiably true of the rest of the world? Were it not that the few struggling political week-

lies, so miserly supported by the American public, shed now and then some ray of light upon the rest of the world the conception of international affairs as held by the people of the United States would be as vague as Homer's map of the world.

But there is no malice back of this condition, though at the hearings of the subcommittee there was in evidence a disposition to assume that there was. Distance imposes handicaps, and the lack of ample and untrammelled communication facilities is not the greatest of them. In the end it is all a matter of lack of interest, as was demonstrated to the satisfaction of those who had reason to admire the enterprise of American news services and newspapers when, during the war, they found ways and means to get news to and from every part of the globe.

Just as the American newspapers will not give space to non-essentials, or what is deemed non-essential by the greatest despot of all history—the American editor and publisher,—so will the foreign paper refuse entry to matter it deems unnecessary, unwise or foolish to print. Each country has its own standard in journalism, and methods differ widely. Most of the papers in Europe and Latin America are publications of a strictly political character and purpose. The “independent paper” is a *rara avis* in Europe, where newspapers, unable

to be eternally on the fence in regard to major issues, as they are in the United States, are expected and compelled by their readers to take sides. It is so throughout Latin America, even if such publications as *La Nacion* and *El Imparcial* endeavor to seem exceptions.

To the seasoned foreign correspondent the views given expression to before the subcommittee referred to above are nothing new. In fact they are decidedly of yesterday. Governments and interested classes everywhere deem it odd that their particular affairs are not given wider publicity—under auspices that make minor facts and incidents the vehicles for the dissemination of views—another definition of propaganda. Such bodies and groups are hard to please, and since they are the source of *force majeure* in all countries much harm is done by them. At best the exchange of news is the exchange of a commodity; ordinarily it is the purveyance of a comfort, a luxury or a non-essential. The proof of this may be found in the fact that news is of no value to him who has no access to it; so far as physical wants and needs are concerned he is none the worse off for not having it.

Thus we enter upon the domain of propaganda, that of "news" written and disseminated for a purpose. Of this we have had a great deal recently—always have a great deal.

The conscientious writer and editor is ever confronted by the necessity of having to draw a line of demarcation between news and propaganda. To him one may ever be the other. Just what his difficulties are may be gauged by considering that a perfectly legitimate item of news may be withheld until it serves a purpose of those who issue it. Naturally, persons who engage in effort of that sort scent without difficulty when others follow their example. It becomes a case of thief catching thief.

It is not to be assumed, however, that a "dark design" is back of all attempts to have one's country better understood. In recent years especially men have come to realize that a fact, event, or incident, just like the paragraph torn from its context, becomes a caricature when presented by itself. "Completeness or nothing" has become the watchword of those governments that have suffered the most from this practice.

On the other hand, this can lead to disconcerting extremes.

To the average American it matters little who sits in a Balkan cabinet. To the Bulgarian and to others it does. It matters even more to those who are in the cabinet, and who for the time being *are* the government. A foreign correspondent can have a lively time in such circumstances. Some-

body demands that he do justice to the event, and that somebody is bound to have an exaggerated conception of what justice in this case is. The correspondent is expected to dwell on why the old cabinet tumbled, what the new one will do to make its own country, its neighbors and the world in general happy for the first time since creation. To all of which may be added sheafs of autobiographical data. None of these details interest the employer of the writer, with the result that the dispatch confines itself to announcing the forming of a new cabinet and the names of those who compose it. Forthwith the same cabinet may pass under the impression that the correspondent is unfriendly. In reality all he has done is to use his judgment, as he must use it to be of further use to those who employ him.¹

These matters are referred to simply to indicate that intentional expansion in news fields is both difficult and dangerous. Foreign aggregates buy abroad what they need, be this an article of commerce or one of news.

It is much more important to pay attention to news that comes in, and on this the writer will allow Walter S. Rogers, American delegate to

¹ Failing to live up to expectations of censors and others in regard to "background" and "completeness" in his dispatches the writer hereof was on the verge of expulsion twice in 1916 and 1917, the Bulgarian government being concerned with the first and the Austro-Hungarian with the second instance.

the International Communication Conference, to express his views:

THE CHAIRMAN [Senator Kellogg]. Now, why is it that there is very little American news published in any part of the world? when you go to Europe you do not see much American news.

MR. ROGERS. Well, there are a number of reasons. Of course, one reason is that until the war Europe was not especially interested in the United States; but one of the basic reasons is that just as London is called the center of the world, London has been the news center of the world, and the leaders in British life have clearly realized the enormous value of making London the permanent news center of the world, and constant pressure has been brought to bear to get low press rates and special service for the press, and it is one of the several things that have gone along together—it has been the British Navy, the British mercantile development, and the British cable development, and the British development of news agencies to distribute the news from England throughout the world. Another reason, of course, is the way the news services of the world are organized. . . . Roughly speaking, the world has been divided between four great news agencies: The American Associated Press, having the United States, Canada, and American possessions; the Reuter, the British agency, having the British Empire (except Canada), Australia, and New Zealand, and practically all of Asia and most of South Africa . . . and the English part of Europe. The French agency, Havas, has had France and all of Latin Europe, most of northern Africa and South America, and French possessions throughout the world. Wolff, the German agency,

has had the Teutonic, the Slavic, and Scandinavian countries. . . .*

Mr. Rogers then explained the relation of the big news services to the lesser ones, pointing out that the Fabia agency of Spain and the Stefani of Italy were supporting concerns of Havas. The American government, he said, had recently become interested in news service contracts throughout the world, and had during the war established a news service to the Latin Americas. Asked by Senator Kellogg what his opinion was in regard to the subsidizing of news services by foreign government, of which he had spoken before, Mr. Rogers begged to be excused on the ground that it might not be well to put such details in the record.²

Newcomb Carlton, president of the Western Union Telegraph Company, was able to corroborate in the main what Mr. Rogers had stated. He added that at the present time there were not

* In what concerns the "Wolff Bureau" Mr. Rogers is not entirely well informed. Scandinavia has had her independent news agencies for many years; the Russian agencies co-operated with Reuter and Havas to the total exclusion of Wolff, while other "Slavic" populations, such as Serbia and Bulgaria had semi-official news agencies of their own, all of them affiliated with Reuter and Havas. Teutonic Austria, Magyar Hungary and the Slavic components of the old Dual Monarchy were served by the K. u. K. Korrespondenz Bureau and the Suedslavische Korrespondenz—the latter a subsidiary of the former—both of which organizations exchanged with Wolff but were not dominated by it. The semi-official and "independent" news agencies of Greece and Turkey were allied to Havas and Reuter.

² CLH, pp. 49-51.

enough cable or other channels through which American news could flow to South America; "to-day much of the American news is going, I am told, via London and thence into South America," said Mr. Carlton; "obviously an unsatisfactory route for handling American news."³

Before the subcommittee testified also William W. Hawkins, president of the United Press Associations, who agreed with Senator Kellogg in that there was a "dearth of American news."

An examination of the Brazilian papers by the United Press in the fall of 1914, showed that over a period of 30 days, there appeared about six small items. . . . These were chiefly about lynchings, railroad wrecks and fires, and events that would more or less cast reflection on the United States rather than help it any. That was true because at that time the news reached South America only by way of Reuter, the British agency, which had a connection for obtaining it in New York [the Associated Press of America], and turned it over in London to a French newspaper man⁴ who sifted it down, after the British man had sifted it and got it down to practically nothing, and then cabled it to Paris, where it was given another French sifting, and finally cabled it to South America.

The result was that the news in the Brazilian papers, as far as the United States was concerned, amounted to nothing whatever except events like the Thaw case, or, as I say, the most popular item was lynching.

³ CLH, p. 107.

⁴ Employee of Havas Agency.



THE CHAIRMAN. And purely sensational matters with no international importance?

MR. HAWKINS. Yes; and anything that gave the impression that the United States was a savage country and that Indians were running wild in the streets of Pittsburg. . . . That was the impression you would get if you read those stories.

THE CHAIRMAN. Right there, that was because the only entry we had into Brazil was over the British line and through British censorship?

MR. HAWKINS. That is not entirely true, Senator. That was because no American press association, or American news agency, had made any efforts up to that time to deliver news to South America.⁵

Later Mr. Hawkins stated that his company now gathered news for South American papers also in Paris, Rome and Berlin, relaying this *via* London, to which point the news went on its way to the United States, explaining further on that his organization "could not compete with the news service in China, for the reason that the Reuter [British] service is laid down in China probably free of cable tolls. I do not know that to be a fact," said Mr. Hawkins, "but certainly, on the basis on which they distribute it, it must be a fact."⁶

⁵ CLH, p. 175. Mr. Hawkins' testimony appears somewhat influenced by the fact that his was the first American news concern that regularly stationed correspondents in South America, an example followed about June, 1917 by the Associated Press, which service had hitherto taken over the Havas and Reuter reports from those parts.

⁶ CLH, pp. 176, 178.

On the same day, though not in connection with press messages, Mr. Carlton stated: "Incidentally and perhaps collaterally to this question, and it will take only a minute, all governments recognize that there is a value, a strategic value if you please, a diplomatic value, in having a cable land on its shores. Obviously, it gives a supervision which it would otherwise not have."

Frederick Roy Martin, acting general manager of the Associated Press,* told the subcommittee that with the Wolff news service shorn of many of its subsidiaries as the result of the war, there were now but three big news services in existence: Reuter and Havas in Europe, and the Associated Press in America, the latter he indicated by inference. The Korrespondenz Bureau of Austria, he said, formerly allied with Wolff, was now associated with Reuter and Havas. The bureau in Denmark, formerly connected with Wolff also was now attached to Reuter and Havas. Norway and Sweden had a news service each, he said, making together perhaps 15 for Europe.

MR. MARTIN. . . . we are in the alliance, the Associated Press, by which I mean not that we take their news from those foreign countries, because we have our own

⁷ CLH, p. 187.

* Mr. Martin is now the general manager of the Associated Press, succeeding as such Melville E. Stone, now counselor of the service.

bureaus at their headquarters in London and Paris, Berlin and Madrid and Rome, etc., but we have access to all their news and they have access to ours in New York.

THE CHAIRMAN. Now, are those large news agencies government subsidized agencies?

MR. MARTIN. They would not say so, Senator. Reuter took considerable of the large subsidy from the British ministry of information during the war for the dissemination of news. I do not know that Havas has a direct subsidy from the French Government. It is undoubtedly friendly to the French Government. I do not know that it has a direct subsidy from the government, however. Whether Wolff has now I do not know.

SENATOR WATSON. Did the Wolff Agency have originally?

MR. MARTIN. I do not know. . . . It is a kind of disappointment to us that virtually all cable news has to come through that little neck of the bottle in England. I would like to say for our English friends, and I spent two years struggling with their censorship during the war, that I do not believe that they are any narrower in their methods of censorship than we are. Only Saturday we had a little bit of excitement because the Navy was censoring one of our dispatches from San Francisco.⁸ We all do it, but it is a troublesome and unnatural fact that all our communications have to come through that little neck of the bottle. I personally would like to see communication restored over the German cable. I do not know with regard to the international questions involved, but I would like, if private means could develop it, that we be given a cable to Scandinavia, and one from Italy and more from France, if private business will do it.

⁸ The United States navy.

Of especial interest were the views of Mr. Martin in regard to what had come to be looked upon at the hearings as a rather general and universal "dearth of American news in foreign countries," as Senator Kellogg expressed it in the question asked of Mr. Martin.

MR. MARTIN. Well, there always is, to an American, Senator, just as—I won't say just as, but similarly—if a Spanish citizen comes to this country he is very likely to wonder why he can not find anything about Spain. I feel that you can not force news, the stream of news, uphill . . . Agence Havas has three or four men in our office in New York with access to the enormous reservoir of news that we have, and its report is that the papers do not want it; and we have had negotiations with one or two individual papers in Paris and they have come back with the reply that their readers do not want it. I do not think you can artificially set up a distribution of news in countries if they do not want the news. I believe South American countries have shown that they do want our news.⁹

George T. Hargreaves, general manager of the Universal Service, testified as to press rates and cable space.

The material is very greatly delayed. Matter that was filed in England by the press rate for the months of November and December last required for receipt in New

⁹ CLH, pp. 284-287.

York an average of 11 hours. Before the war that material was transferred at the press rate in about 4 or 5 hours. From Paris the situation is still worse. The average time from Paris is 12 to 13 hours; that is, by cable. We have been trying to bring from Berlin the bulk of our stuff by radio, and our experience has been very distressing. Frequently we have had delays of from 24 to 35 hours.¹⁰

In weighing the conditions here described it will have to be borne in mind that they were to some extent an aftermath of the recent war. This, however, applies only to what difficulty there was encountered both in regard to cable space and delay in transmission. Nothing at all has changed in the relations between the principal news services and their subsidiaries and competitors. The former still dominate the field of public intelligence, and the smaller concerns take to all sorts of expedients to keep going, the worst and most dangerous of which is, perhaps, the tendency to get exclusive interviews with prominent men. Such interviews are gladly taken by the papers that depend for their normal service upon the large organizations. Usually, they are either live or interesting matter and therefore have a special appeal to the reader. More propaganda is "put over" in such interviews at one fell blow than the

¹⁰ CLH, p. 290.

average press bureau of the foreign office of a government can lay to its credit in a month.

That Reuter, Havas, Wolff and the Associated Press exchange news is often misunderstood. No obligation exists, because that scheme has been found without value, to take what the other agency collects for the purpose of serving with it the individual clientele of papers. As a rule the offices of the big agencies are in close proximity, if not in the same building, and the actual delivery of the news report is either made in sheets or by ticker. The men in the bureaus select what they please, being guided in this by "availability" of the matter, translate or rewrite it, and then send it, or "file" it, as the expression is. With a conscientious man at work the chances of getting propaganda through are not very good, so long as the elements thereof are in detectable form, and almost any reasonable amount of attention to what is going on will enable a man to "keep his nose for dope."

But this is a matter to which American news services do not always give the proper care. Very often, if not always, the men they keep on foreign posts are not familiar enough with the language spoken there to establish the contact necessary to keep them informed in regard to that peculiar class of "news" that never appears in print until it is too late, if ever. It may be of interest to learn

that there is in circulation in every capital in the world a class of information that no newspaper man who intends remaining *persona grata* can put on the wires. The able correspondent, however, is guided by it. He can neither acquire this information, nor profit by it in his work, if he does not know the language in which it circulates.

It is next to impossible, however, to say what is and what is not propaganda in the case of "fact" matter coming from a distance. It is in this department of news that the best effort of the propagandist shines, and against it most foreign correspondents and editors of despatches from foreign countries are helpless. The "fact" despatch is put to illegitimate uses by the omission of essential details that make the occurrence, event or condition described one-sided or "tendencious." For instance, if there be forwarded from a great distance a story to the effect that officials or other subjects of a foreign government had been attacked, maltreated or killed, by members of a subject race, without information as to how it came about, a tendencious color that defies detection misleads the reader. The effect produced would be different if all the story had been told, to wit: That the official or other persons had been the aggressors. In normal times, when minds are calm, it is not so easy thus to prejudice the case of

others. Then, the facts are "pruned down" or purposely garbled. The value of the *first impression* being very generally understood, those who apply such desperate methods count on the public never learning the truth in regard to the matter, as indeed it never does, even if the true state of affairs be later described. Both the foreign correspondent and the editor have a horror of making corrections; even if such be made afterwards but a few of those who were interested in the subject only for a day or two would see it. They have by that time passed to something else.

There is nothing to be gained by going into the doleful subject of censorship in times of war. Suffice it to say, that during the late war the American reader was abused in a manner that well defies description. Thousands of press despatches written by American correspondents were suppressed. Greater numbers were partly suppressed, and large numbers went to their destination with interpolations in them. In the British cable landing licenses are provisions that permit the British government to do with cable despatches whatever they please, — thus they exercise an unlimited control.

But it seems foolish to object to this. The American cable companies accept such cable licenses. They have done it in the past; they will do

it in the future—with the knowledge now of what was done and what will be done again. In times of war nations fight with every available means, and if the falsification of a news despatch serve to promote national interest and public security the government having the means in hand would be deemed foolishly altruistic did it fail to use them. British cable supremacy is looked upon by the Englishman as most essential for his national well-being. That supremacy would be for naught if it served others as well as it serves the British. Obviously, it is not maintained for that purpose, nor would it serve its primary objective did it fail in times of emergency to be of the utmost service to its owners, and this means, of course, that the one and only thing that makes a cable of value, the message, must be under the absolute control of the owner. If to this should belong the censoring of dispatches, the elimination of parts of the text, or the total suppression of messages, the use of information culled, and the interpolation of matter advantageous to the controlling government, those damaged thereby must bear with it unless they see in coercion a remedy which diplomatic representation has not furnished. During the recent war the British government would have been plainly within its right had it closed all of its cables. It pleased that institution not to do so

for two reasons. To close the cables would have prejudiced the United States against Great Britain, and would have in large measure deprived the Allied governments of the means to bring the United States into the war.

Cynical as this may sound, it is nevertheless all that can be said in the premises. War is the recourse to the most primitive means of settling a dispute. It follows that whatever contributes to the prosecution of war must partake of the character of war.

Though cable company and commerce be inclined to think that they have first rights in regard to cable communication, the fact is the national interest, as represented in the press, ought to be considered first. If it be found that this is difficult, owing to the preferential rates given the press, then the rate in question should be abolished. Doing so would have a most salutary effect upon the press of the United States. For one thing it would badly cripple the foreign propagandist. In addition much of the silly drivel now cabled would never be written. Thirdly, it would place a premium on good, honest and well-written mail matter on foreign affairs—something it is no longer possible to find. The present habit of “covering” as much as possible of foreign developments every day, by cable, has led to the most slip-

shod practices. Men afraid of being "scooped" ascertain a part of the total fact, or total of facts, concoct a cablegram that will "protect" them and trust to the ignorance of the editor at home, who, far from the scene, would not know any better even if he were an expert on the subject, which, as a rule, he is not. The same type of correspondent, on the other hand, is generally satisfied with conveying to his paper the official version of things, having discovered that this is the easiest way out and the only insurance against becoming *persona non grata*. The correspondent who draws upon himself the wrath of a foreign office does not last long, except he be a man of unusual ability.

London has been pointed out here as the news center of the world. There is no doubt as to its being this. Here again the advantageous geographic position of Great Britain and her capital has been the principal factor. The British system of cables was the next item in the promotion of this condition, and finally, the British press brings to London all the news of the world, to be pilfered there by whosoever wishes, to appear later in the United States and elsewhere as "our special," without the saving remark: fresh from the *London Times* or *Standard*. It is the lack of enterprise and *amour propre* of the American publisher in the foreign field, and his great reluctance to

spend money for foreign news that has made of England, in matters concerning the American press, "the little neck of the bottle."

With the Azores Islands given a burglar-proof status, and with the cables from France quintupled, if the route via Greenland and Iceland could not be utilized, no little neck in the bottle need trouble the American publisher.

New York, and to some extent the national capital, are still much concerned with means that would make American news welcome in foreign countries. The one looks upon this as the *sine qua non* of satisfactory commercial relations, and the other as the means of closer diplomatic relations. This view may be interesting, but it is not convincing; moreover it has been shown to be a fallacy. The British, usually, sell their wares abroad by advertising and spending money otherwise so as to win the heart of the foreign editor. Moreover, merchandise that is satisfactory and right in price will sell itself, as will the right brand of diplomacy.

One can not but endorse the views held by Mr. Martin of the Associated Press. News that is peddled in the manner proposed ceases to be news. It becomes something else. Then, too, with all regard for the American press, its notions concerning news, and what is news, are not of neces-

sity the final word with readers in foreign countries. Throughout the world there are fires and accidents, interesting murders and piquant divorce trials, and generally little enough is made of them, especially in lands where the view is held that one's private affairs are indeed one's private affairs. It is a little hard to understand why in such countries they should read of American trouble of that sort. Though the writer has represented American news services and papers in many parts of the world, he has never found a dearth of American news in regard to international affairs; those who find the opposite to be true are either unreasonable in their demands or can not read the language of the country they believe to be averse to information from the United States. The fact is that the foreign press brings the essentials.

But of such matters the truth is: All news that is welcome is news; news that is not welcome would be labelled "propaganda."

SUMMARY

Though the government of the United States never failed in realizing the importance of cables as one of the means of international communication, of which President Grant's message to Congress in December, 1875, is ample testimony, and his successors in office likewise furnishing proof whenever the question came up, a really sound policy was never evolved. Cables were viewed as a necessity — as an economic means. The tolls charged by the companies were constantly attracting attention, it being the belief that these were too high.

Investigation shows that such was hardly ever the case. As in the case of all new business, so was the cable business burdened at first with the handicap of being an innovation, a new departure, in which few would readily invest money. The risks were considered too great, and probably they were great, considering that transatlantic cables were hundreds of miles long and that the least defect in them rendered them useless. In the circumstances, then, the companies felt at

liberty to reward themselves. In addition, it has to be borne in mind that the wire space of the first cables went begging a great deal of the time, and that investment and operation cost had to be carried by what traffic there was, not by what traffic there could have been developed under a more liberal policy of administration.

A government guarantee, or subsidy, would have changed many things. But such a guarantee could not be secured. Thus the investor — a foreign investor at that — was expected to provide a public utility at his own expense, often without having the least assurance that there would be fair returns — often, indeed, with the certainty that he would be held responsible in the courts of his own country in case the investments were lost, as they could be lost if the notion as to “reasonable charges” of the Washington government were permitted to rule.

However, the business proved lucrative in the end. The public began to use the cables freely. The dollar earned in the United States having always had a greater purchasing power abroad, that country began to be looked upon by cable companies as a very good opportunity for business. By and by the foreign cable promoter learned how to fit himself into the cable policy of the United

States, and before long there was no more a dearth in cable facilities nor a lack of business.

It was French competition that brought down the cable rates of which almost every president since Grant had occasion to complain. However, the French cable promoters were none too popular. They were constantly being addressed in the most discouraging manner. It is true, of course, that they were ever inclined to drive a hard bargain and now and then they seem to have taken it for granted that they could deal with the Washington government as they could not deal with their own government at Paris. On the other hand, they were the only agents who at all questioned the assumed right of the British cable companies that all cables were to be laid and operated by them.

The era of greatest cable development lies between 1870 and 1890, twenty years during which American money was absorbed by internal development more rapidly than it could be produced. In fact, the United States was very similar during this time to a dry sponge upon which water is being poured. Millions of foreign capital were absorbed annually in railroad and industrial enterprises, and of those millions not a few were lost to the foreign investor irretrievably. The epoch had its "Panama" swindles and foreign governments

were none too well disposed toward those who promoted American enterprises abroad. All these were considerations that were bound to lead toward exploitation rather than toward sound development.

The government of the United States was not ignorant of these conditions. There was ample room for criticism and sufficient cause for bad feeling. There was enough of carping comment.

Thus a penny-wise and pound-foolish cable policy was embraced. And that policy was not consistent. While the government in Washington would not hear of monopolies in so far as American territory was concerned, it tolerated and even encouraged American cable promoters obtaining in Latin America all the exclusive concessions they could get. As was to be expected this took much of the force out of its arguments. The foreign cable promoter in the United States could well argue that the monopolies granted Americans in Latin America were no less monopolies because they had been given to citizens of the United States. On the other hand, the American cable promoter replied that these exclusive concessions were in the nature of subsidies without which he could not operate the cables, without which, in fact, he could not find the money necessary for the enterprise.

Meanwhile, the Congress of the United States had given the matter but scant consideration. The acts that were passed dealt with individual cases and were in the nature of cable landing licenses pure and simple, as was realized presently, with the result that the issuing of landing permits was left to the executive branch of the government. A law conferring this power upon the Executive was not adopted until 1921.

The conditions aired in Washington recently are not of recent standing. The British cables have enjoyed for many years what is virtually a monopoly. The companies owning them had too great a start over their would-be competitors and British prestige in cable matters was such that it gave to the attempt at cable operation by others a decidedly amateurish color. To what extent this was true, and still is true, is best indicated by the head of the largest American cable concern insisting that the British have turned out the only cable operators worth while.

The technical limits of cabling favored the British. It is considered impractical to operate a cable longer than 2,500 nautical miles. That means that a cable stretching from the shores of the United States to the continent of Europe, which, in the case of the French cable between Déolen, Brest and Cape Cod, Massachusetts, is a

matter of 3,175 nautical miles, would not be considered commercially sound. How true this theory is may be a controversial question. At any rate such is the accepted belief. However, from Valentia, Ireland, to Heart's Content, Newfoundland, the cable distance is only 1,900 nautical miles, and the same applies virtually to every other stretch of cable between points in Great Britain and the Dominion of Canada and Newfoundland. Technically, then, the argument is all in favor of having cables between the United States and Europe leave points in Great Britain and land in British North America.

This is still the rule. In the course of time Portugal has passed more and more under the control of the British government. Today the Lisbon government is little more than a satrap of the powers in London. The cable necessities of the British empire have produced that result. On the outskirts of the Portuguese capital is situated one of the largest British cable bases, Carcavelos. The islands of Madera and Cape Verde, also Portuguese, are of the greatest importance in the British cable chain to Africa and South America, though hardly more so than the Azores, in whose case it is not the use that is made of them by the British that is the determining factor, but the use that can not be made of them by others. With

the Azores freed of British control, American cables to Europe could be laid direct to any country that was to be reached. The distance from New York to the Azores is 2,290 nautical miles, as the German cables stretched, and, therefore, well within the practical range of cable operation.

Of course, neither the British nor the Portuguese governments would admit that the Azores have the status here given them. Nominally, the islands are a part of Portugal, practically they are mere real estate of the British cable combine, as is the case with every cable point within Portuguese territory. Portugal is a state whom Great Britain has no reason to fear. The Portuguese colonies in Africa are the pawns. Whatever development there is in them has been fashioned by British capital, and nothing could be easier than to strip Portugal of every colony. A state subsisting entirely on the goodwill of a large power is not likely to adopt measures bound to endanger its security.

While the British do not lack the territory to transfer their cable bases from the Portuguese islands off the African coast to that coast itself, there is a certain advantage in not doing so. The cables in question are trunk lines to South Africa

and South America. As such they are more secure on the Portuguese islands than at continental points. The indolent populations of these islands are not likely to interrupt the cables; on the African continent the chance of interference is much greater.

But this is not the only case in which British cables serve a political and strategic purpose in addition to earning their own keep. It is not necessary, however, to go into that. The case has been cited to show how thorough and far-sighted the cable policy of the British has been.

Recent events have caused men in Washington to look at cables from a similar angle. In the navy especially this has been the case. The world war taught a few lessons. It has been demonstrated that it is not well to be entirely at the mercy of another government in cable matters during an emergency. The fate of the German cables was to make a real issue of a condition that had received the attention of serious men long before — without good result, however.

Article 5, paragraph 2, of the United States naval code provides:

Submarine cables between the territory of an enemy and neutral territory may be interrupted within the territorial jurisdiction of the enemy.

This means that the German cables could have been cut within the three-mile limit of any point along the German coast. As a matter of fact they were cut in the Channel, and long before their status had been settled they were cut again some 600 miles off the United States. One of them was towed to Halifax, and the other was taken into Manhattan Bay with the consent of the United States government, which, contrary to the usual practice, transferred to the French government the privileges conferred upon the German cable company. The haste made in this instance is much regretted today in Washington. Meanwhile, the cut ends in Europe were towed, the one into Penzance, by the British, and the other into Brest, by the French.

On this subject the International Institute, meeting at Brussels in 1902, had this to say:¹

A cable connecting a neutral territory with a territory of one of the belligerents can not under any circumstances be cut in the territorial sea or in neutral waters dependent on a neutral territory. On high seas such cables can not be cut unless there be an effective blockade and within the limits of the line of blockade, except the cable be restored in the least possible delay. The cable may, however, be cut on territory and in the territorial sea dependent on an

¹ Oppenheim, *International Law* (1906), Vol. II, §216, p. 224.

enemy's territory up to a distance of three nautical miles from low water mark.²

There seems to be some equivocation in the above. It is not the intention to delve into that. All that need be said is that a cable may be cut in any circumstances, especially since the question of blockade, effective and ineffective, is one the examination of which has always been unprofitable. Moreover, we have the sterling fact that the German cables were cut and disposed of by those who had the opportunity of doing so. From the practical angle that is all that need interest us.

The cables of that nation are secure that can protect them in times of war, i. e. the nation that has a navy powerful enough to prevent their cutting. The internationalist and pacifist may not hold that view, but it would seem that the lessons of the world war leave no other impression upon the reasonably practical mind. A cable can be cut by any vessel large enough to carry the necessary appliances to lift it to the surface — no great task. Any submarine craft could attend to this detail and in the light of this naval men are still wondering why the German submarines did not during the

² At the 1913 meeting of the Institute this regulation was amended verbally and the following sentence added at the end: "The seizure or destruction must not take place except in case of absolute necessity." *Annuaire*, Vol. XXVI, p. 626.

war cut every cable connecting Europe and America.

To waste time then on projects intended to make cables secure in times of war would not be unlike pouring water into the sea. Taking it for granted that the Azores, or some other point, could be "internationalized," the question still would be: what would be gained by that? It is not necessary to cut within territorial waters cables leading to the United States. They can be cut at any point on the high seas. To say that this would conflict with some paragraph in international law might lead to interesting discussions but would have no practical result. The precedents made during the world war are of record. To some extent they will be incorporated in the new set of rules for international conduct; in their entirety, however, they will be seized upon as valid excuses in the next war.

International communication, then, be this land or submarine or wireless telegraphy, will in the future be at the mercy of the power that can impose its will. That aspect of the case is so definite that consideration for the purpose of finding an alternative is futile.

We come, then, to peace conditions.

The hearings before the subcommittee of the Senate Committee on Interstate Commerce

brought to light a number of conditions that should not prevail, of course. So far as the complaints of merchants are concerned, we may readily grant that there was more smoke than fire. During the war, with governmental *force majeure* ruling everywhere, and with the rights of individuals reduced to a minimum, such things took place, no doubt. Governments everywhere favored their own merchants because the greater their business, the more apparent the government's ability to live up to "business as usual." The appearance of prosperity was necessary in order that war enthusiasm might not flag. Naturally, those governments that did not control cables had not the means to do likewise, and thus the British earned for themselves a shady reputation that others would have gladly shared.

Later, there came the aftermath of censorship and the like. Though the war was over, not all of its effects had as yet been erased or overcome. Probably, the leaking continued. Employees of cable companies had cultivated habits under the tutorship of their governments and employers, and being in the main an underpaid fraternity they may have turned opportunities hitherto exploited by governments to uses of their own. Man cannot be imp today and saint tomorrow.

But there is no doubt that in the course of very

little time this condition also will be overcome, and with this will disappear such cause for complaint as merchants may now have. Normally, the reputation of cable companies is above reproach; their conduct impeccable.

Much was made at the hearing of the fact that their landing licenses oblige American cable companies to turn over to the British government the dispatches that have gone over their cables. At first glance this looks bad enough. Yet in doing that the British government is not as unreasonable as it would seem.

We deal here with another case in which fiction has been labelled fact. There is no secrecy in telegraphy; there is nothing in telegraphy that is inviolate.

In the United States cable messages can be transferred to land lines by the same company. In Great Britain the cable company can lease land lines and establish offices anywhere. In almost every other country the cablegram has to be handed to the local telegraph administration for relay to the addressee.

There are many who deem this a vexing situation. But what can be done about it? The fact that in the United States we have a totally different state of affairs at the present time could not possibly serve as the point of departure in negotia-

tions undertaken for the purpose of changing all this. In the first place the day may come in which the telegraph lines in the United States may pass under the administration of the American postmaster general — a cabinet officer. They did this in Great Britain and they have done it throughout almost the entire world. The first telegraph systems in operation were private enterprises. As such they have disappeared long ago, except in the United States, Canada and a few other states.

If the wishes of large circles in the United States were to be met, the American cable concerns would have to establish their own telegraph lines throughout the world, paralleling in all cases the existing land lines of government telegraphs. Two difficulties are in the way. In the first place, no foreign government is either inclined, nor could it be obliged, to permit this; secondly, such an undertaking is impossible from the angle of economy. What every other government accomplishes automatically, the British government wishes to accomplish by provisions in the landing licenses which it issues. Elsewhere the cablegrams are handled by government employes *in transitu*, and these employes are not likely to be deaf and dumb when it comes to matters of great importance. The world is not run on that plan, and it would not be run on that plan in the United

States were it not that telegraphy is still a matter of private enterprise, which we can but hope it will remain.

But it is not to be inferred herefrom that the means of international communication of the United States could not be improved. They can be improved. Moreover, improvement is feasible without injury to existing institutions. In fact, the older concerns could be used to keep the new ones on their mettle.

The attempt should be made — and to some extent it is being made even now — to get direct cable connections with continental Europe. The Postal Telegraph Company is planning the laying of cables, *via* Azores, to Italy, Germany and probably Scandinavia. The Western Union, likewise, is occupying itself with such projects, while the All-America Cables will continue to extend its service into Latin America. With the radio bound to make further progress this problem, then, is not an insoluble one.

These new connections and facilities would make it possible to maintain telegraphic relations with continental Europe without being dependent upon British goodwill or having, in times of peace, to fear British interference, provided the Azores were given a better international status. From

the commercial angle a most satisfactory state of affairs would then prevail.

The case is rather different in relation to the press and the condition referred to as "public opinion." Wire space itself will not avail in this instance. So long as most foreign news is culled in London, so long will foreign relations of the United States either be dependent upon London or be influenced by London in the other capitals. It is not simply a question of what London thinks of Washington, or Washington of London; it is above all a matter of what other governments think, or are made to think, of the government in Washington. The same applies to the peoples whom these governments represent.

No government will risk a war bound to be unpopular with its constituents from the very start. The first thing to do is to make popular the issues that are to bring on the war, in other words, to borrow the language of an advertising genius who some time ago addressed an advertising men's convention at Boston: the war has to be sold to the people.

To do that is not as simple in every case as it has proved recently. It is especially a difficult task when the chestnuts of some other government have to be taken out of the fire.

The very first step to take is to influence the press of the country whose aid is sought.

As already stated, it is not the use, but the abuse, of international communication that becomes an element of danger. Nor is that abuse confined to times of stress and bloodshed.

Reference has been made to the character of news that reaches Latin America from the United States. The continual serving of items about lynchings, burnings-at-the-stake, shocking murders and salacious divorce cases could have but one effect in the end. It would give the United States a very bad reputation. Such reports are never accompanied by explanatory statements to the effect that lynching and the like is confined to certain states, or that a population of one hundred millions is bound to have its quota of degenerates and irresponsibles. The yarn is dished up by itself, and few indeed are the individuals who, while relishing the account, say to themselves that it is not much different at home.

It is not always illwill, of course, that causes writers to peddle such reports. The newspaper is a business. It must sell. It is supported by those to whom its contents appeal. The halo of the "public print" is a relic of other ages. Journalism today is strictly a case of demand and supply, as probably it ever has been. For the greater part

it lacks all responsibility. The so-called "fact" report is used to suit the ends of those who own or control the paper and its policy. Out of this come many deplorable circumstances. The newspaper hard pressed by competition will sell itself to the highest bidder; the publisher troubled by social ambition will see in his paper the ladder for his climbing. Both of them are in position to publish what they select and suppress what they please. Those who write for them solely must be guided by this; those who write for news services have no control over copy once it is out of their hands. Nor can the news service impose conditions. It, too, depends upon revenue. Last but not least, there is the advertiser — the large space buyer, who makes the newspaper budget possible — who has to be considered.

We deal here not with a condition peculiar to any particular country or people, but with the very practical aspect of newspaper administration throughout the world. The successful press, be it daily or periodical, is run on that basis; the unsuccessful press is not, of course—hence its precarious circumstances. There are newspapers that are ideal, but their influence is negligible, even though they be the scant modicum of yeast that keeps the sodden mass of commercial journalism from becoming concrete entirely.

So far as the activity of the press in times of peace is concerned many suggestions for improvement could be made. In the first place no country has a right to object to the unlovely part of its news crop being peddled abroad so long as its own newspapers stand upon "editorial prerogative" to do the same in regard to other countries. This is a mere matter of reciprocity. Though a very simple proposition, it has been found most difficult to get in this respect a better appreciation of the fit. Writers take it for granted that the affairs of other aggregates are their special quarry. Perhaps, an improvement could be effected by a law obliging writers to sign, and be responsible for, what they write. So far as the United States is concerned it would be a happy day if the mailing privileges were denied to publications carrying anonymous matter making a pretense at being important or dealing with facts. No doubt, such an effort would call forth much complaint about the "freedom of the press" being encroached upon. However, too much attention need not be given this inconsistency. Just as the individual can have no liberty without responsibility so can no institution have the one without assuming the other—rare privilege claimed by journalism almost everywhere. "Freedom of the press," as conceived in the scheme of free political institutions, applies to

the expression of opinion, not to the misuse of facts, as has been in principle admitted by all libel laws.

There is no way of defending a foreign aggregate against attacks by newspapers, though in very gross instances diplomatic channels have been taken recourse to. Generally, the methods used to make of international communication the means of abuse are not as crude as that. The poison is administered homeopathically. Very soon the victim gets in the habit of looking for the stimulant. Trouble is not far off then.

It is a notorious fact that American news is sent to Latin America through British and French channels, both of them semi-official and both of them subsidized by one or several means; one of them being that both have first call on all British and French government news. Semi-official news services are monopolies. Whatever angle of an event they give is the government angle. In most cases the "service" of this sort transmits merely the version of the event prepared in the foreign office of the government whom it serves. It should not be difficult, therefore, to understand that American news disseminated in Latin America by the Reuter and Havas agencies is bound to reflect the momentary attitude of the British and French governments. As a person who has had considerable

experience with this kind of journalism—war and foreign correspondence—the writer could not entertain any doubt as to this if he wanted to. Normally, that may be well enough; in critical times it is not well—it is unwise at any time.

It would be well then that news services supplying the American press identify in all important cases the source of origin, with the papers printing the same following suit. It is manifestly unfair to have a news service parade as its own product some concoction handed to it by a foreign office through a semi-official news agency with which it is affiliated. A worse abuse of the means of international intercourse could not be made. The average reader is intelligent enough to know that he must take with a grain of salt anything that is published by the foreign office of another government, nor need it be taken for granted, normally, that such statements are of necessity always false or designed to mislead. What is true, however, is that such communiqués are issued for the express purpose of serving the interests of that government.

There is another means of lessening the chances of misunderstanding and of war by the proper use of international communication facilities. Possibly, the United States could take the lead in this. The right to cut cables is acceded; the right to

make the radio impossible by artificially set-up disturbances will soon be recognized internationally—if it should not, interference will not be prevented thereby because there would be little valid physical proof of such interference, while the powerful government would simply produce another precedent in international law by doing what it pleased in the promotion of its own “public interest.”

This is a matter in which each nation could act for itself, and in doing so would exert a maximum influence for good upon international relations by confining the remedial effort to its own self.

The remedy lies within the clearly defined scope of municipal law.

Legislation ought to be adopted to the effect that:

The publication of news reports or other matter be interdicted when the source of origin lies in a country

- (A) that has established censorship over matter *in transitu* from neutral countries;
- (B) that has obliged foreign cable companies to carry out for the purpose of supervision conditions such as now em-

bodied in the cable landing licenses granted by the British Board of Trade;

- (C) that has cut cables or is interfering with other means of communication that are serving a neutral as well as a belligerent, mail by water or land to be here included.

To protect the means of international communication against interruption in times of war is quite impossible; what is possible is that by the good use of the means of international communication there be promoted and prolonged man's periods of peace.

Postscript

POSTSCRIPT

Between the writing of a book and its coming-off the press considerable time passes, as a rule. Such has been the case here, and it is necessary, therefore — for the purpose of having the effort up-to-date — to append a short chapter on recent developments in the field of international communication. On the one hand, this is dictated by the fact that a number of new cables have been laid and long-established cables re-laid, while, on the other, we have a pronounced change in American cable policy to deal with. It is the latter especially that compels attention.

As was indicated at the hearings held before the subcommittee of the Senate Committee on Interstate Commerce, American cable companies were none too well pleased with the conditions under which they were operating at the time. While the objections that were entered were exceedingly moderate in scope and tone, they were emphatic nevertheless. It is now very evident that back of the lenient language employed there lay really a firm determination to improve conditions.

One cannot do better here than quote an undated statement made recently by Mr. John L. Merrill, president of the All America Cables, Inc., which says in part:

“The All America Cables . . . have a purpose—a purpose founded upon a sincere belief that the commercial, political and strategic interests of the United States can best be served

by an American-owned and operated system of communications. Trade development is dependent upon ships and cables. Political progress hinges upon the proper understanding of one nation by another, and this can be attained more readily through interchange by cables of daily news."

Today this is the policy of every American cable company. Not that this policy *per se* is new, or a new departure with American cable concerns; it is simply a matter of bringing a hope so much nearer realization.

The actual starting point of betterment in this respect came when the Western Union Telegraph Company made efforts to secure from the Portuguese government a landing license for a cable that was to give direct contact between the United States and Italy. The cable was to be operated jointly by the Western Union and La Compagnia Italiana dei Cavi Telegrafici Sottomarini. As far as Horta, in the Azores, the cable was to be laid by the Western Union; from there to Malaga in Spain, thence to a point near Rome (Fiumicino) it was to be established by the Italian Company. So far as ownership was concerned, then, the cable would be American and Italian, while its several landings would be in the United States, Portugal, Spain and Italy.

But the British were not in favor of this project. To be sure, this time the British Board of Trade had not to be asked for a landing license. However, that was to make little difference. Though the monopoly of cable facilities in the Azores which had been enjoyed by the Europe & Azores Telegraph Company, offspring of the Eastern Telegraph Company—parent of the Electra House group—had expired, the influence of the Eastern was such in Lisbon that no satisfactory landing license

could be obtained by the Western Union. Intercession by the Department of State of the United States failed where the great influence of Mr. Newcomb Carlton, president of the Western Union, had already failed. In the end, Mr. Carlton assuming the offensive, a satisfactory landing license was obtained and the result is that by the end of 1924 there will be in operation between the United States, Spain and Italy — and the whole continent of Europe, therefore — a direct cable neither owned by British interests, nor normally controlled by the British Board of Trade or His Britannic Majesty's ministers. The cable, moreover, is expected to have about eight times the transmission capacity of the more common type of duplex cable, by virtue of being loaded with a new metal of high magnetic permeability: Permalloy, composed of about eighty percent nickel and twenty percent Armco iron. Considering the low speed of many of the trans-Atlantic cables now in operation, this new cable, should its performance come up to expectation, would virtually increase cable facilities to Europe by one-third. Its cost will be approximately \$10,000,000 to the Western Union, and about \$15,000,000 to the Italian company.

Meanwhile, the Postal Telegraph-Commercial Cables Company put in operation last December its new cable New York-Canso (Nova Scotia)-Azores-Waterville (Ireland)-Le Havre. Under the agreement made in 1913 with the Europe & Azores Telegraph Company, and under a landing license obtained at that time by the Europe & Azores from the Portuguese government, the Postal had the right to duplicate the cable it laid from the Azores to New York. The long duration of the World War and the confusion caused by its aftermath made it impossible for the Postal to lay this last cable

within the period specified, but no great difficulty was encountered when notice was given in the course of 1923 that the cable had been manufactured and would be laid. At the present time the Postal has projected a cable New York-Azores-Emden, Germany, but has as yet no landing license from the Portuguese government.

Having composed its difficulties with the Western Telegraph Company, All America Cables, Inc. has given the latter access to certain fields on the west coast of South America, while it has been able to project, by authority of the several Brazilian states touched, an extension of its cable system on the east coast of South America. The new cable line projected begins at Santos, touches at Rio de Janeiro, Victoria, Bahia and Pernambuco, at which latter point it will be in contact with the principal European cables reaching Brazil. The cable field north of Pernambuco remains a monopoly of the Western Telegraph Company as before, though in time the All America Cables may complete the circuit about Latin America by taking over the old United States-Haiti Cable Company cable, a proposal that has yet to receive the consent of the French government. This cable, however, is of the old, slow type and would hardly fit into the present régime of high speed. Improvement in the All America system has further been made by inserting a "T" piece to Trujillo (Peru) in the Paita-Lima cable, and by laying a cable from Colon to Port Limon, establishing connecting land lines and relaying cables on the west coast of Central America.

Officials of these companies expressed keen satisfaction with the co-operation they have been given by the American government; they were rather less enthusiastic over the attitude assumed by other authorities with whom they

have had to deal. Recent negotiations have made it very apparent again that, while the Azores are Portuguese territory, actual control on Fayal island, the point where the Azores cable stations are located, rests in the hands of the Electra House cable group. Back of the many delays experienced stalks British diplomacy. While there is enough business for all the cables now in operation and those projected, each additional non-British cable means an impairment of Great Britain's strategic position in international communication. While cable receipts and cable expansion are by no means negligible quantities, it is really political considerations of prime importance that cause the British government to view with ill-disguised concern the laying of new cables by others.

Nothing has been done as yet to fix, satisfactorily to all concerned, the status of the seized German cables. The two German cables that connected, prior to August, 1914, New York with Emden, via the Azores, were German only in part. As shown elsewhere herein the Azores-New York legs of these cables were laid in co-operation with the Postal Telegraph-Commercial Cables Co. At the outbreak of the war these cables were cut. Shortly afterwards they were towed to other termini by the British and French, later to be operated from there by them. Under the Treaty of Versailles the former German cables were placed in the care of the five principal subscribers of the League of Nations, to whom the revenue resulting from working the cables was to be diverted. The British government, as the operator of one of the cables, and the French Cable Company, as the operator of the other, have failed so far to comply with these terms. One of the results of this is that the Postal Telegraph-Commercial Cable Company is looking in vain for its share of the

revenue derived—an amount said to be about \$10,000,000. Neither the British government, nor the French company have shown the least inclination to discuss this matter. One of the results of this has been that one of the German cables to Pernambuco, and several stretches of former German cables in the Pacific, remain unallocated and idle. Final fixing of their status, it has been feared, would reopen the entire question and for this the League of Nations seems unprepared.

Should permalloy as a cable load prove the success which experiments indicate, direct cables from the United States to any shore point of the continent of Europe may be looked for in the future. The high permeability of this metal, manifested in short cables by great speed, would in longer cables mean greater distances to which the electric current transmitting the message would travel. In permalloy, then, may be found the effective remedy for many of the ills to which international communication is now subject. Such being the case the names of the two inventors of the process by which the alloy is produced require mention. They are: H. D. Arnold, Ph. D., and G. W. Elmen, M. A., of the research laboratories of the American Telephone and Telegraph Company and Western Electric Company, Inc.

Another factor that may come to serve the cause of good international communication is the more or less complete sovereignty of the Irish Free State, at whose shores many of the cables connecting the United States with Europe now land. With the "permalloy" cable obviating relay at shore points in British North America, direct United States cables to Ireland will probably be the next step. In that event the Azores islands would lose much of their importance in tel-electric communication between

Europe and the United States. Improvement in trans-Atlantic cabling seems within reach, therefore.

Meanwhile, the leading wireless telegraphy corporations of the world have formed a consortium in which their interests in undeveloped fields have been pooled. The group is generally referred to as: AEFG—American, English, French and German radio interests. The home plants of these concerns are managed without interference by foreign members of the group, who act as agents for one another in receiving and distributing.

Returning recently from a meeting of the consortium at London, General James G. Harbord, president of the Radio Corporation of America, authorized a press statement, which in part read:

"The plans previously conceived to link the United States and European countries directly with Brazil and the Argentine were enlarged upon at the recent conference. Circuits will extend from the high-power stations at St. Asise, France; Nauen, Germany, and Carnavan, Wales direct to Buenos Aires, while the other will bridge the gap between New York and Buenos Aires through the intermediary (service) of Radio Central, the Radio Corporation of America station on Long Island. The definite intentions manifested by the American, English, French and German radio interests . . . at the recent meetings, to go forward with the plans which were agreed upon, are sufficient proof that the huge program will be brought to a speedy conclusion.

"Reception in Argentina from France and the United States has already been established and the receiving apparatus has been in test operation at Buenos Aires for a number of months. A notable test of the 6000-mile circuit occurred when the returns of the recent Firpo-Willard boxing contest were transmitted from . . . Rocky Point, Long Island, direct

to the receiving station at Buenos Aires. . . . France is using her high-power radio station at Bordeaux to broadcast daily telegraphic press reports, which are received by telegraphers at many distant points. So effective is this transmission that press of the day is frequently picked up by a station at Saigon, in Indo-China, some 6,000 miles distant, as well as at Buenos Aires, over 8,000 miles from Bordeaux." . . .

No extraordinary innovations have been made in wireless during the last two years. Static still gives a great deal of trouble. The indications are that it can only be overcome by relaying. Dependable trans-equatorial wireless service may in the end be achieved only by means of powerful relay stations in the equatorial regions. However, radio is still young and refinements are bound to continue, so that in the end it may be possible to completely envelop the Earth's surface with a wireless message.

But even in that event the submarine telegraph or cable will retain its own province. Though Newcomb Carlton, president of the Western Union Telegraph Company, said in his annual report for 1922: "The capital invested in the 17 cables cannot be liquidated, but it can be protected, if the cables maintain their preferential position based on secrecy and constancy of operation"—a statement sounding caution—his company is willing to make further investments in cables and plants; no less than \$10,000,000 in one instance. Other cable companies are doing the same. Projects for the laying of new cables, re-locating of older cables and replacement, now either adopted or seriously considered, would call for an investment of not less than one hundred million dollars by American companies alone. Naturally, such sums would not be spent did the radio imperil the business of the cables.

In the same report Mr. Carlton said:

"It has been our view that the resources of radio will be combined with those of the cable in the development of a system of world communication that will place the United States first among all countries for capacity and reasonable rates, provided the government will adopt a progressive and businesslike method of dealing with cable companies.

"We are disposed, therefore, to think of the radio in terms of a great medium of transmission and as a potential ally, rather than in terms of a continuing competitor." . . .

In the annual report of the Western Union for 1923 (issued in 1924) we read:

"The gross revenues for 1923 were exceeded only by those of 1920, a year of unprecedented general prosperity. . . . Transatlantic cable rates were reduced about 20%, in April 1923, in spite of which, cable system revenues for 1923 declined less than 10%, as compared with 1922." . . .

In the same year the company expended \$1,388,600 in pensions, and disability and death benefits, for its employes and shouldered the burden of Saturday half-holidays for its operating force at full pay, with vacations costing the organization the sum of \$1,900,000. In that year also the Western Union handled government messages on land lines and cables "at \$749,000 less than the cost of operation and \$924,000 less than the corresponding business would have yielded at commercial rates.

Concluding his report, Mr. Carlton says:

. . . . "In April last (1923) the transatlantic radio rates were generally raised and the corresponding cable rates reduced, resulting in approximate equality. The elimination of

the rate differential, on the basis of which radio traffic had been developed, resulted in immediate and sustained additions to Western Union cable business. The effect of wireless competition upon ocean cable traffic has been closely observed for several years. It is our experience that, where cables can be assured efficient land lines connections, as for example, in Great Britain, France, Italy, Germany, the Netherlands, and Belgium, the cables will hold the business as against wireless competition." . . .

Such, then, is the situation in the field of international communication today.

Two errors will have to be guarded against in the future. One of them is the ever imminent danger of creating a false sense of security by taking it for granted that the radio itself suffices to ensure ample contact between the United States and foreign countries; the other is to be found in the rather general impression that communication by submarine cable can be safeguarded in times of war.

The radio system, like any cable line, can send; it has no control over the receiving station on foreign territory, nor can it determine the quality of the message it receives. Cables, on the other hand, will be cut in the future, as they have been in the past—now all the oftener because during the recent war the British and French governments disregarded, in the most flagrant manner, the rule of international law that cables could be cut only in the territorial waters of the enemy. Today, then, cables may be cut anywhere. They may then be towed to any terminal a powerful government may select.

These are precedents in international affairs that will come to plague those who permitted their setting-up. The means of international communication are made up of

equipment that is strictly national. Only the business that is transacted by means of them can be international. The case is strictly analogous to any mercantile marine engaging in foreign trade.

While a strong navy, or other means of national defense, may protect the "national" means of international communication, those who have the welfare of mankind at heart must continue hoping that states and individuals alike will better realize in the future that the best protection of the means by which we reach our neighbors lies in using them with foresight and moderation—intelligently, in other words.

Appendix

APPENDIX

A

CABLES UNDER GOVERNMENT ADMINISTRATION¹

Generally speaking, the cables or submarine telegraph lines owned and operated by governments may be looked upon as a part of the land telegraph and telephone systems. In the majority of cases such cables cross bodies of water intervening between telegraph and telephone termini, or connect islands with the mainland and with each other, while in a few instances they link colonies to the mother country.

There are some exceptions, however, and in recent years these have increased in number. Governments have deemed it advisable to own cables in common with other governments, or to manage privately owned cables jointly. This applies usually to the governments of neighboring countries, as will be shown further on in this chapter.

The fact that international trunk cables are not owned by governments, or operated by them, appears to be related to the status normally given the high seas, to wit: highway of the nations. Within its territorial waters a government may do, in times of peace in its own right, and in times of war by force, if it have the means, whatsoever appeal to it. Thus it could lay cables without asking another government's permission. It could also lay such cables out of its territorial

¹ All statistical data contained in the Appendix is taken from *Nomenclature Des Câbles Formant Le Réseau Sous-Marin Du Globe*.

waters and across the high seas. But to get a landing license at some foreign shore might turn out to be another matter. Governments generally have come to reserve the right to grant or refuse landing licenses for cables. And such licenses have been refused—even to the very nationals of the government that did refuse, of which the most recent instance is furnished by the United States government and the Western Union Telegraph Company. Naturally, a foreign government in the awkward position of the Western Union would have looked upon the attitude of the American government as an unfriendly act, though normally such contretemps could be avoided, and would be avoided, by diplomatic negotiations beforehand.

But even if diplomatic channels were open to such business, as undoubtedly they would be in case governments engaged more generally in the laying and operating of international cables, the getting of cable landing licenses would always be a critical undertaking. One of the governments would have to take the first step and might meet with a gentle refusal. Since in diplomacy nearly any sort of a refusal is tantamount to a rebuff and is so regarded, world peace would probably not be promoted by having governments more generally engage in the cable business.

Even with the landing license obtained there would still be an ample field of friction. The foreign terminal of the government-operated cable is interested in getting all the traffic it can and depends for this upon the telegraph system of the country concerned. To what situations this may lead is something of which commercial cable companies could sing a long and doleful song. There is always a competitor who manages to stand in better with the telegraph administration, and while landing licenses are indeed explicit, usually, as to the rights and obligations of the contracting parties, as a general thing they are not lived up to. So long as a commercial company is the victim of discrimination, fancied or real, there is some hope of reaching a solution. If the

situation becomes unbearable the courts and diplomacy can be appealed to, with the governments concerned acting finally as mediators, instead of interested parties, which they would be in case the matter at issue involved them directly.

In the light of these circumstances, governments operating submarine cables and telegraph lines on land jointly do so on the basis of each being in sole control of its own terminal of the line. It has been found that this is satisfactory. In times of peace but little passes over the wires that would interest a government and, usually, scrutinizing of messages at one end leads to the same at the other; should war come treaties and obligations are void, and the submarine or land line would cease to function no matter who had operated it.

It is on this general understanding that governments operate cables and land lines jointly.

The largest operator of submarine telegraphs under government management is France. Her home system of cables measures 983 nautical miles. With the exception of the cables linking together Brest, Cherbourg and Dunkerque, and the two lines to Corsica, the cables are short. There are in all 48 cables in the interior of France and in her territorial waters.

The colonial and international cable system operated by the French government comprises 28 cables of 14,692 nautical miles. Seven of these cables connect France with points in North Africa, while three afford direct contact between France and Senegal, one of them being 2,424 nautical miles long (Brest to Dakar). Foreign landings of the French international cable system are: Tanger, Cadiz, Tenerife, Spain; Livourne and Sardinia, Italy; Mozambique, Portuguese East Africa; and Pontianak, Dutch Borneo.

The French government operates jointly with the British government 20 submarine lines in the Channel, many of them used for telephone connection. The total length of these cables is 1,120.7, and one-half of this, or 560.35 nautical miles belong to the French government.

Great Britain and Ireland are second to France in operating submarine telegraphs and telephones by the government. In all 276 lines are under government administration, having a total length of 11,218.4 naut. miles.

The British Interior System is divided into the following groups: Sea of Ireland and St. George Channel, 17 cables; the Channel and Channel Islands, 17; Bristol Channel, 2; the Orkney Islands and Shetland, 30; Hebrides, West Coast of Scotland and Ireland, 53; East Coast of England, 9; East Coast of Scotland, 5; Bays and Estuaries, 104.

The international cables of Great Britain fall into eight groups. Together with the French government the British government operates 20 cables, lying in the Channel and about the Channel islands; with the Belgian government 4, total length 202.23 naut. miles; with the Dutch government 3, total length 333.9 naut. miles; with the German government 6, total length 1,398.2 naut. miles; with the Norwegian government 2, total length 686.1 naut. miles; with the Russian government a line from Peterhead to Archangel, length 1,941 naut. miles; with the Canadian government 2, Mousehole near Penzance (England) to Fayal (Azores) (1,355 m.), thence to Halifax (2,108 m.), and Ballinskelligs Bay (Ireland) to Harbor Grace (Nova Scotia) (1,994 m.), thence to Halifax (688 m.), thence to Rye Beach, N. H., U. S. A. (504 m.); total for the two lines 6,649 naut. miles. The British government owns one cable in China: Chefoo-Weihaiwei (41.9 m.), operated by the Eastern Extension, Australasia and China Telegraph Company.

Of the mileage of cables operated jointly with foreign governments one-half is to be credited to the British government. This applies to the cables operated jointly with France, of which the British share is 560.35 naut. miles.

The British interior system has a length of 1,696.970, the international system one of 9,521.468 m., making the precise total 11,218.438 naut. miles.

Italy's interior submarine telegraph system comprises 83

lines with a total length of 1,991.341 naut. miles. The system is so extensive for the reason that a number of islands have to be connected, such as Sicily, Sardinia, Stromboli, Lipari and Pantelleria.

The international system of Italy connects that country with the east coast of the Adriatic Sea and North Africa. It consists of 14 cables, having a length of 1,152.957 naut. miles. Total cables under the administration of the Italian government: 3,144.298 naut. miles. The status of six of these, owned formerly by Austria-Hungary, has not yet been definitely fixed.

Norway is next in line as having a large number of cables under government administration. Her interior system consists of 396 telegraph and 887 telephone cables, with a total length of 1,491 naut. miles. This condition is due to the many fjords, or inlets along the Norwegian coast.

The Norwegian government operates cables jointly with the Danish, German and British governments, and a short line with the Swedish government. Totals: 11 cables with an aggregate length of 674.693 naut. miles. Grand total: 1,294 cables; 2,166.8 naut. miles.

The German interior system of cables comprises 88 short submarine lines with a total length of 533 naut. miles, and is administered by the government. The international system of the country was fairly extensive formerly, but under Annex 7 to Part 8 of the Treaty of Versailles 20,448 naut. miles of cables were lost, to Great Britain and France for the greater part. Germany's international system today is confined to short cables with the British, Danish, Norwegian, Swedish and Swiss governments. While the German government actually operates 5,080 naut. miles of cables, it owns but 1,765.664 naut. miles of them, the remainder being owned by corporations, 2,397 naut. miles; by foreign governments, 917.336 naut. miles.

Russia in Europe has under government administration 10 cables with a total length of 192.617 naut. miles, connecting

points in the Baltic Sea, Black Sea and Caspian Sea. The government operates an international cable from Sebastopol to Varna in Bulgaria (281 m.), and is half-owner with the British government of the cables from Peterhead, Scotland to Archangel, making a general total of cables operated by the Russia government of 1,443.561 naut. miles.

Spain has quite an extensive cable system under government management. The interior system, which includes cables to the Balearic islands, Tenerife and Spanish Possessions in Africa, comprises 29 lines, with an aggregate length of 3,359.064 naut. miles. The international cables number five and have a total length of 206.092 naut. miles, connecting with Algiers (France) and Morocco. Grand total: 34 cables 3,565.156 naut. miles long.

The Dutch East Indies government operates 34 cables with an aggregate length of 6,860.830 naut. miles, the system being one of the best developed in Asia. Next to it, in length of cables, is the Japanese government, which administers 209 cables with a total length of 5,816.088 naut. miles as the interior system of Japan. The international system of Japan is made up of five cables with points in China, with a total length of 1,993.418. Grand total: 214 cables; 7,809.506 naut. miles.

Under government administration in the Philippine islands are 33 cables with an aggregate length of 846.410 naut. miles, and in Alaska the American government owns 15 cables of a total length of 2,649.631 naut. miles. The Dominion government of Canada administers 68 submarine telegraphs with a length of 396.820 naut. miles, and the Australian Federal government 42 cables together 498.890 naut. miles long. The government of New Zealand operates 42 cables with a mileage of 408.143 naut. miles.

The subjoined tables will supply such data as may be desired in regard to government administration of submarine telegraphs in other countries. Countries not included in the lists either have no cables or continue their

management by private agencies. The states and important cable centers and cable landings reached by privately owned and operated lines are:

Gibraltar, Malta, in Europe; South African Union, Portuguese West Africa; Portuguese East Africa*; Algeria, Ascension Island, Canary Islands*, Cameroon, Cape Verde, Belgian Congo, Ivory Coast, Gold Coast, French Somali Coast, Dahomey, Gambia, French Guinea, Portuguese Guinea, Kenya, Liberia, Madeira Islands, Morocco*, Mauritius Island, Nigeria, Rodriguez Island, St. Helena, St. Thomas, Senegal*, Seychelles Islands, Sierra Leone, Tanganyika, Togo, Tripoli, Zanzibar, in Africa; Arabia, British Borneo, Ceylon, Hongkong, Macao, Cyprus, Cocos Islands, British India*, Dutch East Indies*, French Indo-China*, Labuan, Malacca, Mesopotamia, Oman, Persia*, in Asia; Bermudas, Mexico, St. Pierre and Miquelon, Newfoundland, Antigua, Barbados, Costa Rica, Cuba, Curaçao, Dominique Island, Guadeloupe, Guatemala, Isle of Grenada, Haiti, Jamaica, The Saints, Marie-Galante, Martinique, Nicaragua, Panama, Porto Rico, San Domingo, St. Kitts, Santa Cruz or St. Croix, Santa Lucia, San Salvador, St. Thomas, St. Vincent, Turks Island, Trinidad, Chile, Colombia, Ecuador, Guianas, Paraguay, Uruguay* in the Western Hemisphere; Fanning Island, Fiji Islands, Guam Island, Hawaiian Islands, Yap Island, Midway Island, New Caledonia*, Norfolk Island, in Australia and Oceania.²

The cable system under direct governmental administration in October of 1922 were:

AFRICA	No. of Cables	No. of Miles
Portuguese East Africa	2	26.3
Senegal	1	3.0
Egypt ³	1	190.3

² Those marked with * have a government system also.

³ Turkish cable between Arabia and Egypt operated by the Egyptian government. See Turkey.

ASIA	No. of Cables	No. of Miles
China ⁴	5	957.5
British India	14	2,334.8
Dutch East Indies	34	6,860.8
French Indo-China	1	798.4
Japan ⁵	214	7,809.5
Persia	1	15.2
Philippine Islands	33	846.4
Russia in Asia	1	5.3

AUSTRALIA AND OCEANIA

New South Wales	2	1.8
Victoria ⁶	2	187.6
Queensland	19	50.6
South Australia	3	53.6
Western Australia	3	13.4
Tasmania ⁷	7	191.8
Fiji Islands	1	11.5
New Caledonia	1	1.0
New Zealand	42	408.1
Pacific Cable Board ⁸	7	9,394.3

NORTH AMERICA

Alaska	15	2,649.6
Canada	68	396.8

⁴ Exclusive of 81.2 miles of cable held in common with Japan.

⁵ Exclusive of 7.5 miles of cable held in common with China.

⁶ This cable is held in common with Tasmania, to whom one half of its length is here credited.

⁷ Exclusive of 187.6 miles of cable held in common with Victoria.

⁸ Operates the following cables: Bamfield, Vancouver, to Fanning island; Fanning island to Suva, Fiji Islands; Suva to Norfolk island; Norfolk to Auckland, New Zealand; Norfolk to Doubtless Bay, New Zealand; Doubtless Bay to Auckland; Sydney to Auckland; Bamfield to Victoria, Vancouver.

SOUTH AMERICA

Argentina ⁹	26	71.0
Brazil ¹⁰	35	47.9
Uruguay ¹¹	6	9.4
Venezuela	7	606.0

The large numbers of cables credited here to the Dutch East Indies, Japan, the Philippine Islands, New Zealand, Canada, the Argentine and Brazil are due to the insular character of some of the countries while in other cases rivers and estuaries had to be traversed.

B

CABLES OPERATED BY PRIVATE
CORPORATIONS

In March of 1923 the following commercial cables corporations and commercial cables were operating:

Name of Corporation	Seat	No. of Cables	No. of Miles
BRITISH COMPANIES¹²			
African Direct Telegraph Company*	London	8	2,882.7
Cuba Submarine Telegraph Company**	London	12	1,482.7
Direct Spanish Telegraph Company*	London	2	705.6
Direct West India Cable Company***	London	2	1,266.9
Eastern Telegraph Company*	London	153	52,453.8
Eastern and South African Telegraph Co.*	London	15	10,395.5
Eastern Extension, Australia and China Telegraph Company*	London	31	27,642.3
Europe and Azores Telegraph Company*	London	2	1,062.1
Halifax and Bermudas Cable Company***	London	1	851.8
Indo-European Telegraph Company****	London	4	191.6
River Plate Telegraph Company*	London	4	221.0

⁹ Exclusive of 0.944 miles held in common with Uruguay.

¹⁰ Fifteen of the cables are branch lines with a total mileage of 26.7.

¹¹ Exclusive of 0.943 miles held in common with Argentine.

¹² *Shows companies having their headquarters at Electra House, Moorgate, E. C. 2. **Located at 58, Old Broad Street, E. C. 2. ***Located at 33, Old Broad Street, E. C. 2. ****Located at 18, Old Broad Street, E. C. 2. †Located at Spencer House, 4, South Place, Finsbury, E. C. 2.

Name of Corporation	Seat	No. of Cables	No. of Miles
West African Telegraph Company*	London	8	1,474.1
West Coast of America Telegraph Co.* . . .	London	7	2,041.0
Western Telegraph Company*	London	37	28,823.0
West India and Panama Telegraph Co.† . .	London ¹²	22	4,355.0
<i>Totals</i>		308	135,849.1

AMERICAN COMPANIES

All American Cables, Inc., 89 Broad St., New York	36	18,103.3
Commercial Cable Co., 253 Broadway, New York	16	17,500.0
Commercial Cable Company of Cuba, 253 Broadway	New York. 2	1,549.7
Commercial Pacific Cable Company, 253 Broadway	New York 6	10,016.4
Mexican Telegraph Co., 89 Broad St., New York	5	3,139.9
United States and Hayti Telegraph and Cable Company, 42 Broad St. . . .	New York 1	1,391.3
Western Union Telegraph Company, 195 Broadway	New York 33	21,812.6
<i>Totals</i>	99	73,513.2

FRENCH COMPANIES

Compagnie française des câbles télégraphiques, 53, rue Vivienne	Paris 25	15,245.3
Compagnie des câbles sud-américains, 25, rue de Clichy	Paris 4	2,777.9
<i>Totals</i>	29	18,023.2

ALL OTHER COMPANIES

Société anonyme belge des câbles télé- graphiques (The Belgian Telegraph Cable Co.), Electra House, Moor- gate, E. C. 2	London 2	60.8
Compañía telegráfica-telefónica del Plata, Sarmiento 467	Buenos-Aires 3	84.0
Det Store Nordiske Telegraf-Selskab, 28, Kongens Nytorv, K	Copenhagen 26	8,417.7
<i>Totals</i>	31	8,562.5

¹² *Shows companies having their headquarters at Electra House, Moorgate, E. C. 2. **Located at 58, Old Broad Street, E. C. 2. ***Located at 33, Old Broad Street, E. C. 2. ****Located at 18, Old Broad Street, E. C. 2. †Located at Spencer House, 4, South Place, Finsbury, E. C. 2.

RECAPITULATION	No. of Companies	No. of Cables	No. of Miles
British Companies	15	308	135,849.1
American Companies	7	99	73,513.2
French Companies	2	29	18,023.2
All Other Companies	3	31	8,562.5
<i>Totals</i>	27	467	235,948.0
GRAND RECAPITULATION	No. of Cables	No. of Miles	
Cables under governmental administration			
Europe	2,545		42,379.2
Africa	3		29.3
Asia	302		19,627.9
America	157		3,780.7
Australia and Oceania	85		10,313.8
<i>Totals</i>	3,092		76,130.9
Cables operated by corporations ¹³	467		235,948.0
Cables whose status was upset by the Treaty of Versailles and which have not yet been allo- cated	7		6,079.2
<i>Grand Total of all cables laid and in operation, April 1, 1923</i>	3,566		318,158.1

To the totals here given must be added —

The new cable of the Postal Telegraph-Commercial Cables Company: New York-Canso-Azores-Waterville-Le Havre. The same company proposes laying a cable from New York direct to the Azores, thence to Emden, Germany.

The new cable of the Western Union and La Compagnia Italiana dei Cavi Telegrafici Sottomarini: New York-Azores-Malaga (Spain)-Fiumicino (near Rome, Italy) which will be ready for operation by the end of 1924. The same company has laid a new two-conductor cable from Valentia, Ireland, to Penzance, England. The Western Union no longer operates the old Direct United States Cable, which it leased from the British government. This cable was turned over to its owner and forms now a part of the British "All Red."

¹³ Does not include the cables of the German cable companies, which are at present operated by the German government and are credited under cables administered by governments. The total length of these cables is: 2,397.0 naut. miles.

All America Cables, Inc. has extended and improved its system by means of a new cable from Colon (Panama Canal Zone) to Port Limon (Costa Rica) (199.1 nautical miles), a land line from Port Limon to San José (Costa Rica) (103 statute miles), thence to Puntarenas (C. R.) (62.5 stat. m.). The company's cables on the Pacific have been relaid as follows: Puntarenas to Balboa (Canal Zone) (567 n. m.); Puntarenas to Santa Elena (Ecuador) (927 n. m.); Puntarenas to San Juan del Sur (Nicaragua) (216.4 n. m.), and Puntarenas to Salina Cruz (Mexico) (948. n. m.). A new "T" piece has been laid to Trujillo (Peru) from the Paita-Lima (Peru) cable. The company has obtained landing licenses for a cable from Santos to Rio de Janeiro, thence to Victoria, Bahia and Pernambuco, all in Brazil. Negotiations are in progress for the old United States-Haiti cable, subject to action by the French government. This cable is old and slow, and to fit it into its system the All America Cables, Inc. would probably have to replace it by a new high-speed cable. The company also is considering the laying of a cable from Rio de Janeiro to Fisherman's Point (Guantanamo Bay, Cuba) via the island of Fernando de Noronha (Brazil); this cable, however, is at the present time but a vague prospect.

Of important cable extensions elsewhere may be named the new cable of the Eastern & South African Telegraph Company, laid from Aden (Arabia) to the Seychelles islands in the Indian Ocean (1,587 n. m.).

C

CABLES OPERATED BY COMMERCIAL CABLE COMPANIES IN THE UNITED STATES

ALL AMERICA CABLES, Inc., 89 Broad Street, New York.

System of the Atlantic.

		When Laid	Con- duc- tors	No. of Nautical Miles
1	Vera Cruz to Coatzacoalcas, Mexico	1882	1	134.0 ¹⁴
2	Vera Cruz to Coatzacoalcas, Mexico	1889	1	142.3

¹⁴ This cable is 795.710 naut. miles long; 738.00 naut. miles of it belong to the Mexican Telegraph Company.

	When Laid	Con- duc- tors	No. of Nautical Miles
3 Galveston to Coatzacoalcas, Mexico	1905	I	57.7
4 Coney Island to Cristobal, Panama			
a Coney Island—Fisherman's Pt., Cuba	1907	I	746.2 ¹⁵
b Fisherman's Point to Cristobal	1907	I	788.3
5 Coney Island to Cristobal			
a Coney Island—Fisherman's Point ...	1915	I	736.2 ¹⁶
b Fisherman's Point—Cristobal	1915	I	782.5
6 Fisherman's Point to Santiago de Cuba ..	1921	I	43.4
7 Fisherman's Point to Ponce, Porto Rico ..	1921	I	639.1
8 Cristobal to Cartagena, Colombia	1920	I	315.7
9 Rio de Janeiro, Brazil to Montevideo, Uruguay	1920	I	1,194.6
10 Santos, Brazil to Montevideo	1920	I	1,069.7
11 Cerro-Montevideo, Uruguay to Atalaya, Argentina	1919	I	66.4
12 Same termini as No. II	1920	2	66.3
13 Same termini as No. II	1920	I	68.2
14 Colon, Panama to Limon, Costa Rica	1922	I	199.2
14.....	Total		7,049.8

System of the Pacific.

I Salina Cruz, Mexico to San Juan del Sur, Nicaragua	1882	I	667.6
2 San Jose, Guatemala—Salina Cruz ¹⁷ ...	1882	I	36.2
3 La Libertad, Salvador—Salina Cruz ¹⁷ ..	1882	I	43.0
4 Salina Cruz to San Juan del Sur	1893	I	692.6
5 San Juan del Sur to Panama	1882	I	713.7
6 San Juan del Sur to Santa Elena, Ecuador	1883	I	1,041.0
7 Panama to Santa Elena	1882	I	918.2
8 "T" piece: Bazan Point—Buenaventura, Colombia	1882	I	38.5
9 "T" piece: Esmeraldas, Ecuador	1882	I	4.7
10 Panama to Santa Elena	1913	I	752.8
11 Santa Elena to Guayaquil, Ecuador	1882	I	93.0
12 Santa Elena to Payta, Peru	1882	I	237.3
13 Payta to Chorrillos, Peru	1882	I	558.3
14 Santa Elena to Chorrillos	1893	I	831.4
15 Same termini as No. 14	1920	I	808.3
16 Chorrillos to Lima, Peru	1882	I	9.0

¹⁵ This cable is 1,484.206 naut. miles long; 738.00 naut. miles of it belong to the Mexican Telegraph Company.

¹⁶ This cable is 1,474.204 naut. miles long; 738.00 naut. miles of it belong to the Mexican Telegraph Company.

¹⁷ "T" pieces. No. 2 cuts into the Salina Cruz to San Juan del Sur cable; No. 3 into the same from La Libertad, Salvador. Abolished in recent re-locating of main cables.

	When Laid	Con- duc- tors	No. of Nautical Miles
17 Chorrillos to Iquique, Chile	1891	1	780.8
18 Same termini as No. 17	1906	1	845.9
19 Iquique to Arica, Chile	1920	1	130.2
20 Iquique to Valparaiso, Chile	1906	1	903.1
21 Iquique to Antofagasta, Chile	1913	1	264.3
22 Antofagasta to Valparaiso	1913	1	683.5

22..... *Total*11,053.4
 Plus mileage of Atlantic System 7,049.8

36..... *Grand Total*18,103.2

COMMERCIAL CABLE COMPANY, 253 Broadway,
 New York, U. S. A., and No. 24, Boulevard des
 Capucines, Paris, France.

Transatlantic System.

1 Waterville, Ireland to St. Johns, Nfld. ..	1884	1	1,812.8
2 Waterville to St. Johns	1884	1	1,830.2
3 Waterville to Canso, Nova Scotia	1894	1	2,169.1
4 Waterville to Horta, Fayal, Azores	1901	1	1,204.7
5 Canso to Horta	1900	1	1,698.7
6 Waterville to Canso	1905	1	2,237.3

6..... *Total*10,952.8

European System.

1 Le Havre, France to Waterville	1885	1	522.5
2 Waterville to Weston (Bristol)	1885	2	331.4
3 Same termini as No. 2	1901	1	328.9
4 Same termini as No. 2	1910	1	335.1

4..... *Total* 1,517.9

American Coast System.

1 St. Johns to New York	1909	1	1,301.9
2 Same termini as No. 1	1909-1912	1	1,265.0
3 Canso to New York	1884	1	857.9
4 Same termini as No. 3	1900	1	889.1
5 Canso to Rockport (Boston), Mass.	1884	2	516.6
6 Canso to Port-au-Basque, Newfoundland ..	1905	1	199.0

6..... *Total* 5,029.5
 Plus mileage of Transatlantic System10,952.8
 Plus mileage of European System 1,517.9

16..... *Grand Total*17,500.2

COMMERCIAL CABLE COMPANY OF CUBA,
253 Broadway, New York, U. S. A.

	When Laid	Con- duc- tors	No. of Nautical Miles
1 New York to Havana, Cuba	1907	1	1,287.1
2 Miami, Fla., to Havana	1921	1	262.7
2 <i>Total</i>			1,549.8

COMMERCIAL PACIFIC CABLE COMPANY,
253 Broadway, New York, U. S. A.

1 San Francisco to Honolulu, Hawaii	1902	1	2,276.3
2 Honolulu to Midway Island	1903	1	1,332.1
3 Midway Island to Guam Island	1903	1	2,607.1
4 Guam Island to Manila, Philippines			
a Guam—Bacon, Luzon Island	1903	1	1,328.0
b Bacon—Sorsogon (subterranean)	1903	1	5.2
c Sorsogon—Manila	1903	1	304.3
5 Manila to Shanghai, China	1906	1	1,264.2
6 Guam to Peel, Bonin islands	1906	1	899.2
6 <i>Total</i>			10,016.4

MEXICAN TELEGRAPH COMPANY, 89 Broad
Street, New York, N. Y., U. S. A.

1 Galveston to Vera-Cruz, Mexico			
a Galveston—Tampico, Mexico	1881	1	 ¹⁸
b Tampico—Vera Cruz	1881	1	222.2
2 Same termini as No. 1, direct	1889	1	703.7
3 Section of Galveston-Coatzacoalcas cable ..	1905	1	738.0
4 Section of Coney Island-Fisherman's Point cable	1907	1	738.0
5 The same as No. 4 cable	1915	1	738.0
5 <i>Total</i>			3,139.9

UNITED STATES AND HAYTI TELEGRAPH
AND CABLE COMPANY, 42 Broad Street,
New York, U. S. A.

1 New York to Cape Haiti	1896	1	1,391.3
--------------------------------	------	---	---------

¹⁸ Not in operation at the present time. This leg of the Galveston-Vera Cruz cable is 473.8 naut. miles long.

WESTERN UNION TELEGRAPH COMPANY,

195 Broadway, New York, U. S. A.

		When Laid	Con- duc- tors	No. of Nautical Miles
<i>Transatlantic System.</i>				
1	Sennen Cove, Penzance, England to Roberts Bay, Newfoundland	1881-1910-1913	1	2,121.5
2	Same termini as No. 1	1882-1910-1915	1	2,126.9
2..... <i>Total</i>				4,248.4
<i>American Coast System.</i>				
1	Colinet, Nfld. to No. Sydney, Nova Scotia	1913	1	321.4
2	Canso, Nova Scotia to Hammels, N. Y. ..	1889	1	759.1
3	Hammels to St. Pierre (south cable)	1869-1889-1918	1	1,063.8
4	St. Pierre to Placentia, Newfoundland ..	1920	1	135.6
5	North Sydney to Island Cove, Nfld.	1921	1	326.0
6	Hearts Content, Nfld. to Rantem, Nfld. .	1921	1	25.2
6..... <i>Total</i>				2,631.1
<i>European System.</i>				
1	Sennen Cove to Valentia, Ireland	1918	1	275.3
2	Same termini as No. 1	1920	1	286.1
2..... <i>Total</i>				561.4
<i>Gulf of Mexico System.</i>				
1	Punta Rassa, Fla. to Sanibel Island	1890	1	2.3
2	Punta Rassa to Key West, Fla.	1889	1	121.3
3	Key West to Cojimar	1899	1	98.2
4	Same termini as No. 3	1886	1	103.7
5	Same Termini as No. 3	1917	1	96.2
6	Miami, Fla. to Key West	1899	3	131.0
6..... <i>Total</i>				552.7
<i>Antilles System.</i>				
1	Miami to Barbados Island	1920-1922	1	1,630.7
	Plus mileage of Transatlantic System			4,248.4
	Plus mileage of American Coast System			2,631.1
	Plus mileage of European System			561.4
	Plus mileage of Gulf of Mexico System			552.7
17				Total of Western Union Telegraph Co. Cables ... 9,624.3

"ANGLO-AMERICAN TELEGRAPH," subsidiary¹⁹ of
The Western Union Telegraph Company,
195 Broadway, New York, U. S. A.

	When Laid	Con- duc- tors	No. of Nautical Miles
<i>Transatlantic System.</i>			
1 Valentia, Ireland to Hearts Content, Nfld.	1873	1	1,912.7
2 Same termini as No. 1	1874	1	1,873.8
3 Same termini as No. 1	1880	1	1,889.1
4 Same termini as No. 1	1894	1	1,853.0
5 Sennen Cove, Penzance to Roberts Bay, Newfoundland	1910	1	2,053.9
5	Total		9,582.5
<i>European System.</i>			
1 Cuckmere, Seaford, England to Le Havre, France	1900	1	81.4
<i>American Coast System.</i>			
1 New Brunswick to Prince Edward Island	1856	1	9.8
2 Rantem, Nfld. to Hearts Content, Nfld. ..	1873	1	26.1
3 Same termini as No. 2	1880-1898	1	25.6
4 North Sydney, N. S. to St. Pierre ..	1873-1918	1	208.3
5 St. Pierre to Island Cove, Nfld. ...	1873-1918	1	128.6
6 North Sydney to Island Cove	1873	1	305.8
7 Placentia, Newfoundland to St. Pierre	1880	3	110.6
8 St. Pierre to North Sydney	1880	3	186.4
9 North Sydney to Canso, Nova Scotia	1891	1	117.5
10 Roberts Bay to Hammels, N. Y.	1910	1	1,405.8
10	Total		2,524.5
	Plus mileage of Transatlantic System		9,582.5
	Plus mileage of European System		81.4
16	Total of "Anglo-American Telegraph" Cables ...		12,188.4
17	Total of Western Union Telegraph Co. Cables ...		9,624.3
33	Total cables operated by Western Union Tel. Co. ...		21,812.7

D

FOREIGN COMMERCIAL CABLES CORPORATIONS

African Direct Telegraph Company (British).

This company operates eight cables between Europe and

¹⁹ In the sense that its cables are leased to the Western Union Telegraph Company.

Africa, the first of which was laid in 1884, from St. Vincent to San Thiago, in the Cape Verde islands (201 nautical miles), from which point it was extended to Bathurst on the African continent (469 m.) in 1886. During that year also the system was extended from Bathurst to Sierra Leone (488 m.) thence to Secondee (957 m.) thence to Accra (106 m.) thence to Lagos (281 m.) thence to Bonny (316 m.) terminating today, through an extension made in 1902 at Cotonou (66 m.), making the total length of the cable 2,882.7 nautical miles.

Extensive repairs on the system were made in 1907 and 1914.

Compagnie des Câbles Sud-Américains (French).

The first of the four cables of the company was laid in 1892 from Dakar, Senegal (Africa) to Fernando do Noronha, Brazil (1,621 m.). In the same year was laid the second leg, from the last-named point to Pernambuco, Brazil (347 m.). In 1912, the company laid a cable from Conakry, French Guinea, to Monrovia, Liberia (Africa) (310 m.) and a fourth from Monrovia to Grand Bassam, Africa. Total length of the cables: 2,777.898 nautical miles.

Compagnie Française des Câbles Télégraphiques (French).

Of the twenty-five cables of the company, twenty-four lie in the waters of the Atlantic. The first of them was laid from Deolen, near Brest, France to St. Pierre, on the island of St. Pierre and Miquelon (2,359 m.) in 1879, and to it was joined, in the same year, the leg from Cape Cod, Mass. (839 m.), and the one from Canso, Nova Scotia (258 m.)

During the following year, 1880, the company laid a cable from Brignogan, Finisterre (France) to Porthcurno in Cornwall (England) (110 m.) to which it added another in 1918 (108 m.). In 1898 the company laid another cable from Deolen to Cape Cod (3,176 m.), adding thereto, in the following year, the Cape Cod-New York leg (325 m.).

The third transatlantic cable of the company was established in 1900-3, forming two sections: Minou (Brest) to Fayal in the Azores (1,190 m.) and Fayal to Manhattan Bay (New York) (2,290 m.). It was laid by the German Atlantic Cable Co., who lost it as the result of the war.

These are the principal cables of the company. Its other lines are: Santiago (Cuba) to Mole St. Nicholas (Hayti) (165 m.); from the latter point to Cape Hayti (96 m.), thence to Puerta Plata (Dominican Rep.) (116 m.), thence to Fort de France (Martinique) (820 m.) thence to Paramaribo (Dutch Guiana) (700 m.), thence to Cayenne (French Guiana) (268 m.) and thence to Salinas, near Para (Brazil) (506 m.); St. Domingo to Mayaguez (Porto Rico) (188 m.), Mole St. Nicolas to Port-au-Prince (Hayti) (111 m.), St. Domingo to Curacao (Windward Islands) (452 m.), thence to La Guayra (Venezuela) (161 m.) and to La Velo de Coro, near Coro (Venezuela) (59 m.). Another cable of the company runs from Saint Marie (Martinique) to Gozier, near Pointe-à-Pitre (Guadeloupe) (102 m.) and thence to St. Louis (Marie Galante island) (19 m.). From Gozier the company also has a loop to Highlands (Isle of Saints) (23 m.) thence to Basse-Terre (Guadeloupe) (14 m.). The only cable of the company in other waters connects Mon Repos, Queensland (Australia) with Teoudie, New Caledonia (789 m.). The system comprises 15,245 nautical miles.

Compañia Telegráfico-Telefónica del Plata (Argentine).

Operates three cables between Punta de Lara to La Colonia, Argentine Republic, laid between 1888 and 1920, each 28 miles long.

Cuba Submarine Telegraph Company (British).

Operates the following cable, 12 sections: Batabano (Cuba) to Cienfuegos (2 lines, one 139 m. and the other 137 m.), Cienfuegos to Santiago (398 m.), Cienfuegos to

Casilda (40 m.), thence to Tunas (28 m.), thence to Jucaro (46 m.), thence to Santa Cruz (81 m.), thence to Manzanillo (59 m.), thence to Cape Cruz (51 m.), thence to Santiago (141 m.). There is another loop out of Cienfuegos to Cape Cruz (225 m.), thence to Santiago (138 m.). The first cable was laid by the company in 1891. Its total mileage today is 1,482,730.

Direct Spanish Telegraph Company (British).

The company has two cables: One from Porthcurno (England) to Arrigunaga, near Bilbao in Spain (498 m.), and the other from Barcelona (Spain) to Marseilles (France) (207 m.). The second of these was laid in 1874, the other ten years later. Total length of system: 705,552 nautical miles.

Direct West India Cable Company (British).

The system consists of two legs: Bermuda to Turks Island (815 m.) and thence to Jamaica (452 m.). Both cables were laid in 1898 and measure 1,266,915 nautical miles.

Eastern Telegraph Company (British).

This company controls one-sixth of all the cables in the world (52,454 nautical miles out of 318,158), without taking into account the lines operated by its subsidiaries, of whom the Western Telegraph Company (28,823 nautical miles) is but one.

The Anglo-Spanish-Portuguese System of the company had its beginning in 1870, when the Porthcurno (Cornwall, England) Carcavelos (near Lisbon, Portugal) cable was laid (865 m.). In 1887 this line was doubled (922 m.). Meanwhile a cable had been laid from Porthcurno to Vigo in Spain in 1873 (623 m.) and another from Vigo to Carcavelos (264 m.). In 1898 the first direct Porthcurno-Gibraltar cable was established (1,190 m.), flanked since then, in 1919, with another (1,169 m.), reinforcing thus the connection with Gibraltar set up in 1897 when the Vigo

cable was extended to that point (644 m.). Already in 1870 Gibraltar had been linked to Carcavelos (360 m.). To this cable was added another in 1887 (334 m.), while in 1888 Villa Real de Santo Antonio (Portugal) was also joined to Gibraltar (153 m.). Two short cables at Belem (Portugal) (2.4 m.) complete this system.

The Anglo-Ascension-Capetown System of the company consists of the following cables: Porthcurno-Fayal (1,321 m.), Porthcurno-Madeira (1,344 m.), thence to St. Vincent (1,128 m.), thence to Ascension Island (1,775 m.), thence to St. Helena (789 m.), thence to Robben Island (near Capetown, South Africa) (1,886 m.). The company also operates a cable from Sierra Leone to Ascension Island (1,117 m.) and two short cables between Robben Island and Capetown (11.5 and 6.6 m.). This part of the company's huge system was developed between the years 1889-1903.

The Malta-Western System consists of 22 cables and its development dates back to 1870. These are: Gibraltar to Tanger (34 m.), five cables from Gibraltar to Malta (1,156 m., 1,141 m., 1,119 m., 1,092 m. and 1,135 m.), two cables from Marseilles (France) to Bone (Algeria) (446 m. and 466 m.), two cables from Bone to Malta (381 m. and 376 m.), Malta to Tripoli (193 m.), two cables from La Valette (Malta) to Pozallo near Modica (Sicily) (54 m. and 58 m.), and one cable from Malta to the island of Zante (400 m.). The company also has a cable from Torre Cannelle near Orbetello (Italy) to Marinella Vecchia (Sardinia) (119 m.) and five cables from De Pezollo near Bagnara (Calabria, Italy) (9 m., 8 m., 8.4 m. and 10 m.) the fifth of which is not being operated at the present time by the Italian government to whom they are leased. Two other of the company's cables are leased to the Italian government. They are: Milazzo (Sicily) to the island of Lipari (27 m.) and from Lipari to the isle of Salina (4 m.).

The Italo-Greek System of the company consists of three cables: D'Otrante (Italy) to Zante (on the island of that

name) (200 m.), Torre del Orso to Sidari Bay (Corfu) (65 m.) and Trieste to Corfu (504 m.). The system dates back to 1861 and no additions have been made since 1882.

The Greek System of the Eastern Telegraph Company comprises short cables for the greater part, but is of great importance nevertheless since upon it depends the tel-electric intercourse in the Greek archipelago. Its beginning dates back to 1871. There are thirty (30) different cables: Zante to Katacolo (Morea-Greece) (25 m.), three cables from Kalamaki (Morea) to Piraeus (near Athens) (30.5 m., 31.4 m. and 33.4 m.), three cables from Corinth to Patras (72.7 m., 74.5 m. and 73.6 m.), three cables from Patras to Zante (55.3 m., 58.7 m. and 55.3 m.), Zante to Corfu (167 m.), three cables from the isle of Syra to Piraeus (81.9 m., 86.1 m. and 102.3 m.), Zante to La Canée (Crete) (257 m.), Syra to Candia (Crete) (136 m.), two cables from Syra to Chios (95.4 m. and 89.3 m.), Syra to Tenedos (159 m.), La Canée to Rethymo (Crete) (35 m.), thence to Candia (42 m.), thence to Sitia (56 m.). La Canée to Candia (67 m.), Chios to Tenedos (102 m.), thence to Lemnos (58 m.), thence to Salonika by two cables (139 m. and 144 m.) and finally the Lemnos-Chio line (120 m.).

The Turco-Greek System of the company consists of five (5) cables: Sitia to Rhodes (146 m.), two lines from Chios to Tchismeh in Asia Minor (7.9 m. and 7.7 m.), Tenedos to Besika (5 m.) and Tenedos to Nagara in the Straits of the Dardanelles (34 m.)

The Turkish System of the Eastern owns three cables: Nagara to Kartal in the Bosphorus (144 m.) and three cables from Roumelie Hissar to Anadolu Hissar (on opposite sides on the Bosphorus) together about two nautical miles long.

In the Black Sea the company controls, together with the Indo-European Telegraph Company, the cable from Odessa (Russia) to Kilia, near Constantinople (336 m.).

The Eastern's Egypt-European System consists of five (5)

cables between Malta and Alexandria (Egypt) (915 m., 915 m., 899 m., 890 m. and 907 m.), Sitia (Crete) to Alexandria (382 m.) and Larnaca on Cyprus to Alexandria (322 m.). The system was started in 1868, and materially augmented in recent years.

The Egyptian System consists of the Alexandria-Port Said cable (152 m.).

The Indo-Egyptian System of the Eastern dates back to 1877 and is the one which the company has developed with tremendous energy in recent decades. It consists of the cable Suez-Aden (1,406 m.), four cables from Suez to Port Sudan (765 m., 748 m., 753 m. and 757 m.), Suez to Suakin (802 m.), thence to Perim (660 m.), two cables from Port Sudan to Perim (604 m. and 618 m.), two cables from Port Sudan to Aden (760 m. and about 770 m.), four cables from Perim to Aden (108 m., 144 m., 100 m. and 114 m.), Perim to Obok (53 m.), four cables from Aden to Bombay (1,856 m., 1,790 m., 1,853 m. and 1,845 m.), and finally the longest cable of the company: Aden to Colombo (Ceylon) (2,263 m.). The Durban (Natal, South Africa) Mauritius Island cable (1,731 m.) and a number of land lines in India and Africa connect these systems with all the other systems of Africa and Australasia, most of them subsidiaries of the Eastern.

In addition to the cables leased to the Italian government, the Eastern has leased the Zante-Katacolo line to the Greek government, and the Perim-Obok line to the French government. The total mileage of all cables leased is negligible, however. The exact length of the company's cables is 52,453.835 nautical miles, plus such cables as are now being laid—most of them as part of the Indo-Egyptian System.

Eastern and South African Telegraph Company (British).

This company operates fifteen cables, with a total nautical mileage of 10,395.480. Its first cable was laid in 1879. The system comprises: the cable from Aden to Zanzibar (1,958

m.), thence to Mombasa (149 m.), two lines from Zanzibar to Mozambique (651 m. and 707 m.), Zanzibar to the Seychelles islands (1,125 m.), thence to Mauritius island (1,065 m.), Zanzibar to Dar-es-Salaam (67 m.), Mozambique to Durban (1,195 m.), Mozambique to Beira (538 m.), thence to Lorenzo Marquez (591 m.), and thence to Durban (352 m.). In addition there is a "T" piece from Kiliman, cutting into the Mozambique-Beira cable (69 m.).

On the southwest coast of Africa the company has the following cables: Loanda to Benguela (Port. West Africa) (296 m.), thence to Mossamedes (235 m.), and thence to Robben Island (Capetown) (1,396 m.).

Eastern Extension, Australasia and China Telegraph Company (British).

This company operates thirty-five cables in the parts of the world signalized by its name. The first of its cables was laid in 1870 from Penang to Singapore. The system today comprises the following lines: Two cables from Madras (India) to the island of Penang (1,527 m. and 1,388 m.), Colombo (Ceylon) to Penang (1,407 m.), Madras to Singapore (1,702 m.), four cables from Penang to Singapore (403 m., 399 m., 402 m. and 389 m.), Penang to Medan (159 m.), Singapore to Batavia (Java) (548 m.), Singapore to Banjoewangi (Java) (939 m.), Singapore to Saigon (Cochin-China) (626 m.), two cables from Banjoewangi to Darwin (South Australia) (1,144 m. and 1,153 m.), two from Bondi Bay near Sidney (New South Wales) to Titai Bay near Wellington (N. S. W.) (1,339 m. and 1,352 m.), Hongkong (China) to Saigon (956 m.), Hongkong to Manila (P. I.) (738 m.), Hongkong to Sharp Peak (Foochow) (475 m.), Hongkong to Macao (37 m.), Saigon to Doson (Cochin-China) (798 m.). The last of these cables is at the present time under French administration.

Other cables of this company in Far Eastern waters are: Shanghai (China) to Sharp Peak (450 m.), Singapore to

Labuan (738 m.), Singapore to Hongkong (1,522 m.), Labuan to Hongkong (1,239 m.), and Labuan to Menambok (11 m.). The Australasian system of the company is completed with the cables: Mauritius to Roderique Island (404 m.), thence to Cocos Islands (2,151 m.), thence to Fremantle (Australia) (1,721 m.), thence to Glenelg near Adelaide (1,546 m.), and Cocos Islands to Batavia (778 m.).

The cables Woosung (China)-Chefoo (China)-Taku (China) and Weihaiwei (China) are operated by this company jointly with the Great Northern Telegraph Co. (Danish), one of them: Woosung-Chefoo, and two others, Chefoo-Taku, belonging to the Chinese government, while the fourth Taku-Weihaiwei, belongs to the British government.

The exact length of the cables of this company is 27,642.290 nautical miles.

Europe and Azores Telegraph Company (British).

Operates the cable Lisbon-Ponta Delgada (877 m.)-Horta (Fayal, Azores) (185 m.). Total: 1,062.040 nautical miles.

Det Store Nordiske Telegraf-Selskab (Danish). (Great Northern Telegraph Company.)

The total length of this system is 8,417.7 nautical miles, and the first of its cables was laid in 1868, from Moen (Denmark) to the isle of Bornholm (82 m.). The cables of the company today are: Seydisfjord (Iceland) to Thorshavn (Faroe Islands) (319 m.), thence to Burwick (Shetland) (215 m.), two cables from Newbiggin (England) to Marstrand (Sweden) (502 m. and 520 m.), Newbiggin to Hirtshals (Denmark) (427 m.), two cables from Newbiggin to Soenderwig (Denmark) (347 m. and 349 m.), two cables from D'Oye (France) to Fanoe (Denmark) (390 m. and 370 m.), Skagen (Denmark) to Marstrand (34 m.), Moen to Bornholm (82 m.), thence to Libau (Latvia) (226 m.), Roedwig to Libau (320 m.), thence to Petrograd (Russia) (472 m.), three cables from Grisslehamn (Sweden) to Nystad (Finland) (97 m., 104 m. and 107 m.), Grisslehamn

to Aland island (Finland) (29 m.), thence to Nystad (56 m.).

The company has the following cables in Asia: Hongkong (China) to Kulangsu near Amoy (China) (330 m.), thence to Woosung near Shanghai (China) (620 m.), thence to Nagasaki (Japan) over two routes (490 m. and 480 m.), thence to Vladivostock (Russia in Asia) over two routes (773 m. and 756 m.), and two short cables between Kowloon and Hongkong both in China (0,860 m. and 0.840 m.).

The Great Northern also operates the lines: Woosung-Chefoo-Taku and Amoy-Kulangsu, belonging to the Chinese government.

Halifax and Bermudas Cable Company (British).

Operates the Halifax (Nova Scotia)-Bermuda cable; 851.833 nautical miles.

Indo-European Telegraph Company (British).

The longest cable of this company is the one lying between Odessa (Russia) and Kilia (Turkey) (336.520 m.) of which 168.260 m. are the property of the Indo-European. The other lines of the company are: Kertch (Crimea) to Taman (Caucasus) (8 m.), and two lines across the strait of Kertch (6.5 m. and 8.8 m.). Total length: 191.615 nautical miles.

River Plate Telegraph Company (British).

Operates the lines: Punta Yeguas (Uruguay to Colonia (Uru.) (88 m. and 86 m.) and Colonia to Punta Laura (Argentine) (22 m. and 24 m.). Total: 221.04 nautical miles.

Société Anonyme Belge des Câbles Télégraphiques (Belgian).

Operates the cable from Middelkerke (Belgium) to Dumpton Gap, near Ramsgate (England) (55 m.), and a "T" piece from Banana (Belgian Congo) to the St. Thomas island-Loanda cable of the West African Telegraph Company. The seat of the company is London. Total: 60.82 nautical miles.

West African Telegraph Company (British).

The total length of this system is 1,474.07 nautical miles, divided as follows: Belama to Bissao, both in Portuguese West Africa (26 m.), Conakry to Sierra Leone (Gold Coast) (73 m.), St. Thomas to Prince Island (Portu.) (126 m.), St. Thomas to Loanda (829 m.), Prince Island to Bonny (Brit. Poss.) (190 m.), Bathurst to Bissao (224 m.), and two cables in Prince Bay (3.2 m. and 3.2 m.).

West Coast of America Telegraph Company (British).

Operates 2,041.04 nautical miles in all; laid as follows: Chorrillos (Peru) to Mollendo (Peru) (542 m.), thence to Arica (Chile) (148 m.), thence to Iquique (Chile) (128 m.), thence to Antofagasta (Chile) (264 m.), thence to Serena (Chile) (456 m.), thence to Valparaiso (Chile) (230 m.), thence to Talcahuano (Chile) (273 m.).

Western Telegraph Company (British).

The company laid its first cables in 1873 and the system today consists of 28,822.99 nautical miles of cables, connecting the following points: Carcavelos (Portugal)-Madeira Island, two lines (622 m. and 625 m.); Madeira-St. Vincent (Cape Verde), two lines (1,243 m. and 1,179 m.); Fayal (Azores)-St. Vincent (1,464 m.), St. Vincent-Pernambuco (Brazil), two lines (1,859 m. and 1,863 m.); St. Vincent-Ascension Island (1,833 m.), thence to Buenos Aires (Argentine) (3,144 m.) Ascension Island-Rio de Janeiro (Brazil) (2,103 m.), Barbados Island-Maranham (Brazil) (1,504 m.), Para (Brazil)-Maranham (389 m.), Para-Pernambuco (1,271 m.), Maranham-Ceara (Brazil) (402 m.), Maranham-Pernambuco (966 m.), Ceara-Pernambuco (440 m.), Pernambuco-Maceio (Brazil) (176 m.), two lines from Pernambuco to Bahia (Brazil) (466 m. and 445 m.); Pernambuco-Rio de Janeiro (1,367 m.), two lines from Bahia to Victoria (Brazil) (532 m. and 489 m.), two lines from Victoria to Rio de Janeiro (343 m. and 292 m.), three lines

from Rio de Janeiro to Santos (Brazil) (231 m., 209 m. and 204 m.), Rio de Janeiro to Maldonado (Uruguay) (1,099 m.), Santos to Santa Catharina (Brazil) (288 m.), Santos to Chuy (Uru.) (757 m.), Santa Catharina to Rio Grande do Sul (Brazil) (399 m.), thence to Chuy (148 m.), thence to Maldonado by two lines (120 m. and 137 m.), thence to Montevideo (Uru.) by three lines (70 m., 72 m. and 71 m.).

West India and Panama Telegraph Company (British).

The total length of this system is 4,355.0 nautical miles, connecting the West Indies islands: Santiago (Cuba) to Holland Bay (Jamaica), two lines (160 m. and 146 m.); Kingston (Jamaica) to Colon (Panama) (630 m.), Holland Bay to St. Juan (Porto Rico) (683 m.), thence to St. Thomas (72 m.), Holland Bay to Ponce (Porto Rico) (647 m.), thence to St. Croix (135 m.), thence to St. Thomas (48 m.), thence to St. Kitts (161 m.), thence to Antigua (49 m.), thence to Basse Terre (Guadeloupe) (73 m.), thence to Dominica (51 m.), thence to St. Lucia (109 m.), thence to St. Vincent (58 m.), thence to Barbados by two lines (99 m. and 94 m.); St. Croix (Santa Cruz) to St. Lucia (344 m.), thence to Grenada (154 m.), thence to St. Vincent (84 m.), two lines from Grenada to Trinidad (89 m. and 125 m.), and thence to Demerara (British Guiana) (344 m.).

THE GERMAN COMMERCIAL CABLE COMPANIES

The Treaty of Versailles (Annex 7 of Part 8) resulted in the German companies losing their cables. Most of these have already been allocated. Those not yet divided are: Menado (Island of Celebes) to the island of Yap (1,076 m.), thence to the island of Guam (563 m.); Yap to Woosung (China) (1,777 m.); Monrovia (Liberia) to Pernambuco (Brazil) (1,873 m.), Accra to Lome (969 m.) and Lome to Duala (606 m.), making a total of 6,079.22 nautical miles.

Deutsch-Atlantische Telegraphen Gesellschaft (Cologne, Germany). (German-Atlantic Telegraph Company.)

Owned and operated before the war the following cables: Borkum (Germany) to Horta (Azores) (1,888 m.), thence to Coney Island (New York, U. S. A.) (2,302 m.). This line was laid down in 1900. In 1903 and 1904 it was flanked by another of respectively 1,960 m. and 2,357 m. In 1905 the company bought up the *Deutsche See-Telegraphen Gesellschaft*, operating the cable from Borkum to Vigo, in Spain (1,154 m.). Total length of cables operated before the war: 9,661 nautical miles.

Deutsch-Niederlaendische Telegraphen Gesellschaft, A. G. (Cologne, Germany). (German-Netherlandish Telegraph Company, Limited.)

Operated 3,416 nautical miles of cables in the Pacific before the war: Menado to Yap, thence to Guam, and Yap to Woosung, mentioned already above.

Deutsch-Südamerikanische Telegraphen-Gesellschaft, A. G. (Cologne, Germany). (German-South American Telegraph Company, Limited.)

This company operated the following cables: Emden (Germany) to Santa Cruz de Tenerife (2,135 m.), thence to Monrovia (Liberia) (1,803 m.), thence to Pernambuco (Brazil) (1,873 m.); Monrovia to Lome (Togo, German colony) (969 m.), and Lome to Duala (Cameroons) (606 m.), making a total of 7,386 nautical miles.

Osteuropaeische Telegraphen-Gesellschaft (Cologne, Germany). (East European Telegraph Company.)

Operated a cable from Constantza (Rumania) to Kilia (Turkey), 185 nautical miles long.

The total length of cables lost by the several German companies as the result of the Treaty of Versailles is:

	Naut. Miles
German Atlantic Telegraph Company	9,661
German-Netherlands Telegraph Company	3,416
German South American Telegraph Company	7,386
East European Telegraph Company	185
<i>Total</i>	20,648

Cables still owned by these companies, but now operated by the German government 2,397

Making the total of nautical miles of cables owned and operated by the German companies before the war, or at the signing of the Treaty of Versailles 23,045

E

CABLES OWNED AND OPERATED BY EUROPEAN GOVERNMENTS AND CORPORATIONS

In October 1922 the following cables and cable-mileage was being operated in Europe or owned by European corporations and governments:

	Under direct governmental administration		Owned and operated by corporations		Grand Total Miles
	Cables	Tot. Mi.	Cables	Tot. Mi.	
Albania ²⁰ .....	...	.....	...	.....	.....
Belgium ²¹	4	101.1	...	.....	101.1
Bulgaria ²² .....	...	.....	...	.....	.....
Denmark ²³	181	526.4	30	8,417.7	8,944.1

²⁰ The 234.8 miles of cables between Albania and Italy are owned and operated by the Italian government.

²¹ The cables being owned in common by the Belgian and British government, the same mileage: 101.1 is to be credited to Great Britain.

²² The 280.7 miles of cables between Bulgaria and Russia are owned and operated by the Russian Government.

²³ Exclusive of 53.5 miles held in common with Norway and Sweden.

	Under direct governmental administration		Owned and operated by corporations		Grand Total Miles
	Cables	Tot. Mi.	Cables	Tot. Mi.	
Esthonia ²⁴	23	221.8	...	.....	221.8
Finland ²⁵	6	132.0	...	.....	132.0
France ²⁶	96	16,235.2	29	18,023.2	34,258.4
Germany ²⁷	108	1,765.7	...	.....	1,765.7
Great Britain ²⁸ ..	276	11,218.4	294	135,849.9	147,068.3
Greece ²⁹	49	170.3	...	.....	170.3
Iceland ³⁰	32	38.6	...	.....	38.6
Italy ³¹	97	3,144.3	...	.....	3,144.3
Latvia ³²	1	8.6	...	.....	8.6
Norway ³³	1,294	2,166.8	...	.....	2,166.8
Netherlands ³⁴	26	270.9	...	.....	270.9
Portugal ³⁵	6	121.0	...	.....	121.0
Serbia, etc. ³⁶	47	288.9	...	.....	288.9

²⁴ Exclusive of 122.6 miles held in common with Finland and Latvia.

²⁵ Exclusive of 114.0 miles held in common with Esthonia.

²⁶ Exclusive of 560.4 miles operated jointly with Great Britain.

²⁷ Exclusive of 118.7 miles operated jointly with Sweden,
 26.1 " " " " Denmark,
 298.0 " " " " Norway,
 460.5 " " " " Great Britain,
 14.1 " " " " Switzerland, and
 2,397.0 " belonging to private corporations but oper-

ated by the German government.

²⁸ Inclusive of 560.4 miles operated jointly with France,
 101.1 " " " " Belgium,
 167.0 " " " " The Netherlands,
 689.1 " " " " Germany,
 343.0 " " " " Norway,
 970.3 " " " " Russia,
 6,648.6 " " " " Canada, and
 41.9 " " " in China.

²⁹ Exclusive of 409.3 miles leased from the Eastern Telegraph Company.

³⁰ Under the sovereignty of Denmark.

³¹ Exclusive of 181.1 miles of cables the status of which has not yet been determined.

³² Exclusive of the same mileage belonging to Esthonia; part of the same cable.

³³ Inclusive of 298.0 miles operated jointly with Germany,
 33.7 " " " " Denmark, and
 343.0 " " " " Great Britain.

³⁴ Inclusive of 167.0 miles operated jointly with Great Britain.

³⁵ Includes the cables connecting the Azores archipelago.

³⁶ Exclusive of 181.1 miles of cables the status of which has not yet been determined.

	Under direct governmental administration		Owned and operated by corporations		Grand Total Miles
	Cables	Tot. Mi.	Cables	Tot. Mi.	
Rumania ³⁷ .....	...	.....	...	.....	.....
Russia in Europe ³⁸	8	1,443.6	...	.....	1,443.6
Spain ³⁹	34	3,565.2	...	.....	3,565.2
Sweden ⁴⁰	236	489.0	...	.....	489.0
Switzerland ⁴¹	3	14.1	...	.....	14.1
Turkey ⁴²	39	457.4	...	.....	457.4

The large number of cables credited to Denmark, Esthonia, Germany, Greece, Iceland, Italy, Norway, Sweden and Turkey are due to the circumstance that many islands had to be connected or large numbers of fjords or other bodies of water traversed. The same applies to the number of cables owned and operated by the British government, and to a lesser extent to the number of cables owned and operated by the French, Esthonian, Dutch, Spanish and Turkish governments.

F

LIST OF SUBSIDIES GRANTED FOREIGN CABLE COMPANIES BY THEIR GOVERNMENTS

Eastern Telegraph Company.

£10,000 in 1900 by British Imperial Government to defray extraordinary expenditures incurred in laying with greater expedition the cable from St. Helena island to Capetown; measure due to late South African war.

³⁷ Rumania telegraph administration operates 185.0 miles of cables between Kilios, Turkey, and Constantza, Rumania, status of which has not yet been determined. These belonged formerly to the East European Tel Co. (German).

³⁸ Exclusive of 970.3 miles operated jointly with Great Britain.

³⁹ Includes 1,019.1 miles of cables (3) out of commission.

⁴⁰ Inclusive of 118.7 miles operated jointly with Germany,
19.7 " " " " Denmark, and
0.094 " " " " Norway.

⁴¹ Lake Constance system; owned and operated jointly with Germany.

⁴² Includes 190.3 miles from Djedda, Arabia, to Souakim in Upper Egypt.

£45,000 annually for twenty years, beginning 1901, for the cable between Ascension island and Sierra Leone, Africa.

Eastern Extension, Australasia and China Telegraph Co.

£1,000 annually for ten years, beginning 1880; afterwards £400 annually, by Straits Settlement government, for line between Malacca and the mainland. Expired.

£32,000 annually for 20 years, by governments of New South Wales, Victoria, South Australia, West Australia and Tasmania, for second cable between Singapore and Australia. Expired.

Guarantee of traffic revenue on Australian cables, by governments above enumerated, beginning in 1892, in consideration of reduction of cable rates.

Guarantee of traffic revenue on New Zealand cable, by the above plus New Zealand government, 1892, for the same consideration.

£4,200 annually for 20 years, beginning 1889, by the same governments minus New Zealand, for the cable to Tasmania. Expired.

£4,000 annually, by the British Imperial Government, so long as the company operates, beginning with 1900, the cable between Chefoo-Weihaiwei and Taku-Chefoo-Shanghai lines.

Eastern and South African Telegraph Company.

£55,000 annually for 20 years, beginning 1879, for the cables from Aden to Zanzibar, thence to Durban, by the British Imperial Government (£35,000), Cape Colony Government (£15,000) and Natal Government (£5,000). Expired.

£13,500 annually for 20 years, beginning 1920, for the reduction of cable tolls on the company's South African cables and other considerations, by the British Imperial Government (£4,375), Cape Colony (£3,000), Natal (£825), British

South African Company (£300), and Transvaal government (£5,000). Expired.

£28,000 annually for 20 years, beginning 1893, by the British Imperial Government (£10,000), Indian Government (£10,000), Mauritius Government (£7,000), and Seychelles Government (£1,000), for the cable from Zanzibar to Mauritius, and thence to Seychelles. Expired.

£3,500 annually for 10 years, beginning 1900, by the British Imperial Government, for the cables from Zanzibar, Seychelles and Mauritius, and to Mozambique and Delagoa Bay; the latter two are points in Portuguese East Africa. Expired.

African Direct Telegraph Company.

£19,000 annually for 20 years, beginning 1886, for the cable from St. Vincent to Bathurst, Sierra Leone, Accra, Lagos and Niger Settlement, by the British Imperial Government (£14,000), Gambia (£500), Sierra Leone (£1,300), Gold Coast (£2,200), and Lagos (£1,000). Expired.

Halifax and Bermudas Cable Company.

£8,100 annually for 20 years, beginning 1890, by the British Imperial Government, for the cable from Halifax to Bermuda. Expired.

Direct West India Cable Company.

£800 annually for term unknown but now expired, beginning 1898, by the British Imperial Government, for the cable from Bermuda to Turks Island and Jamaica; £2,120 annually for 5 years, for the same cable; Jamaica (£2,000) and Turks Island (£120); these subsidies have since then been renewed and now run from year to year, that by Jamaica being now £1,000.

West India and Panama Cable Company.

£8,000 annually for 10 years, beginning 1914, for the com-

pany's cables and wireless, by the British Imperial Government.

£8,000 annually by the Canadian Government for the same consideration.

£10,300 by the Crown agents in behalf of the West India islands for the same consideration. The subsidy to be reduced if revenue exceeds certain amounts.

Compagnie Française des Câbles Télégraphiques.

Francs 800,000 annually for 30 years, beginning 1898, by the French Government, for the cable from Brest to Cape Cod and other lines.

Guarantee in regard to revenues of the cable from Queensland, Australia, to New Caledonia, beginning 1897, payable jointly by the French and Australian governments on the basis of a minimum income of Francs 360,000.

German Atlantic Cable Company.

Marks 1,710,000 (gold) lump sum payment on January 1, 1903, by German Government for cables between Germany and the United States.

G

CABLE LAYING AND REPAIRING VESSELS

According to the most reliable data now available the world's fleet of cable laying and repairing vessels numbers 51, with a gross tonnage of 84,551. The largest of these ships is the *Colonia*, of the Telegraph Construction and Maintenance Company of London, having a displacement of 7,981 gross tons. Used largely in laying cables, the ship needs but 846 nominal horse powers. Of cable ships that combine large tonnage with great speed, considering the type of vessel and the work to be done by it, may be men-

tioned the *Telegraaf*, employed by the Dutch government in the East Indies. This ship has 3,230 gross tons and 1,577 H. P.

The world's fleet of cable laying and repairing vessels is owned and operated as follows:

	Government Owned and Operated	Privately Owned and Operated
Great Britain and Colonies	7	23
France	1	2
United States	3	6
Japan	2	0
Italy	1	0
Netherlands	1	0
Denmark	0	3
Germany	0	2
	—	—
<i>Totals</i>	15	36
		15
		—
<i>Grand Total</i>		51

INDEX

- Anderson, Rear Admiral, 68, 69
 Arnold, H. D., Ph. D., 220
 Augustus, Emperor, 18
- Barlow, Samuel L. M., 61
 Bau, Professor, 1
 Beck, Albert, 95
 Bemis, Professor, 1
 Bennett, James Gordon, 21, 61
 Benson, Admiral, 1
 Bright, Charles T., 85
 Budd, J. W., 94
- Caperton, Admiral, 132
 Carlton, Newcomb, 70, 83, 109,
 117, 122, 123, 124, 125, 128,
 129, 130, 131, 132, 133, 134,
 135, 175, 176, 178, 217, 222,
 223
 Chauvin, G. von, 50, 51, 52, 56
 Clowery, Robert, 69
 Collins, Perry MacDonough, 40
- Davis, Norman H., 72, 73, 75,
 131, 132, 134
 Decker, Rear Admiral U. S. N.,
 68
 Denison-Pender, Sir John K. C.
 M. G., 81, 82, 83, 84, 94 (J.
 Denison Pender)
 Dillon, Count, 56
- Elman, G. W. M. A., 220
 Evarts, Wm. M., 48, 49, 50, 51,
 52, 56, 57, 58
- Field, Cyrus W., 20, 60
 Firpo-Willard, 221
 Fish, Hamilton, 47, 49
- Fralick, Murphy & Co., 67, 88,
 90, 95, 97
 Frelinghuysen, 61, 62
- Garrett, Robert, 61
 Goldhammer, John, 113, 114, 115,
 116, 117, 119, 120, 121, 122,
 135
 Gould, Jay, 20, 100
 Grant, President, 42, 45, 47, 59,
 69, 84, 97, 190, 192
 Grey, Sir Edward, 31, 32, 33, 104
- Harboard, James G., 221
 Hargreaves, George T., 180
 Havas Agency (French), 174,
 175, 177, 178, 179, 180, 182
 Hawkins, William W., 176, 177
 Hill, Captain F. K., 125, 126,
 127, 128, 130
 Homer, 170
- Kellogg, Senator, 72, 115, 116,
 120, 121, 122, 123, 124, 125,
 126, 127, 128, 129, 130, 131,
 132, 133, 134, 168, 174, 175,
 176, 177, 179, 180
- Lansing, Robert, 30, 31
 Latrobe, Ferdinand C., 47
 Lavissee, Dr. Ernest, 8
- Mackay, Clarence H., 115, 117
 Mackay, John W., 20, 61
 Mahoney, Thomas H., 1
 Marconi, Signor Guglielmo, 22,
 139
 Martin, Frederick Roy, 178, 179,
 180, 188
 McKinley, President, 95

- McSweeney, Edward F., 9
 Merrill, John L., 215
 Moreno, Celso Caesar, 45, 61
- Neilson, George R., 94
 Nevins, Allen, 1
 Nordhoff, Charles, 61
- Oppenheim, 198
 Outrey, Max, 57
- Page, W. H., 30
 Pender, J. Denison (See Denison-Pender)
 Pouyer-Quertier, 56, 103
- Reuter Agency (British), 174,
 175, 177, 178, 179, 182
 Rogers, Walter S., 173, 174
- Root, Elihu, Jr., 79, 80, 124, 125
- Schreiner, George Abel, 1, 8, 9
 Scrymser, James A., 40, 41, 67,
 86, 88, 97, 135
 Stone, Melville E., 178
 Sylva, Carlos Ferreira dos Santos,
 92
- Taff, 70
 Tebbets, Colonel, 68
 Thaw, 176
- Walker, George, 102
 Ward, George G., 95
 Watson, Senator, 80
 Wilson, President, 67, 68, 70, 84
 Woolff Agency (German), 174,
 175, 178, 179, 182

CITIES AND COUNTRIES

- Abou Zabal, 154, 155
- Africa, 20, 65, 105, 154, 155,
 195, 196
- Alaska, 24, 149
- Annapolis, 143, 146
- Argentine Republic, 76, 221
- Arlington, 143
- Ascension Island, 82
- Aspinwall, 88
- Asia Minor, 18, 23, 45, 105
- Australia, 105, 145, 153, 154,
 169, 174
- Australasia, 23, 105
- Azores, The, 4, 7, 41, 63, 64, 73,
 74, 80, 91, 92, 93, 94, 114,
 119, 120, 121, 188, 195, 200,
 204, 216, 217, 218, 219, 220
- Baalbac, 18, 240
- Bagdad, 155
- Bahamas, 40, 60
- Bahia, 218
- Ballinskellig Bay, 99
- Barbados, 67, 69, 70, 82, 84,
 105, 137
- Bathurst, 155
- Beira, 65
- Belgium, 119, 156, 224
- Benegucla, 65
- Berlin, 24, 177, 178, 181
- Bermuda, 24, 41
- Bombay, 154, 155
- Bordeaux, 222
- Boston, 99, 144, 205
- Brazil, 29, 66, 67, 69, 70, 74,
 76, 78, 84, 122, 137, 152, 154,
 177, 218, 221
- Brest, 19, 58, 64, 73, 74, 98, 99,
 119, 194, 198
- Brownsville, 87
- Brussels, 198
- Budapest, 24
- Buenaventura, 89
- Buenos Aires, 67, 79, 96, 132,
 154, 221, 222
- Cairo, 154, 155
- Calais, 20

- California, 95
 Calloa, 89
 Canada (or Canso), 24, 49, 91,
 92, 93, 119, 154, 169, 174,
 195, 203
 Canso, Nova Scotia, 64, 114, 120
 Canton, 153
 Cape Breton, 49
 Cape Cod, 49, 51, 52, 62, 64, 99,
 119, 194
 Capetown, 155
 Cape Verdi (St. Vincent), 65, 195
 Carcavelos, 64, 195
 Caribbean Sea, 78, 155
 Central America, 155, 218
 Charleston, 144
 Chile, 96
 China, 95, 153, 156, 177
 Coblenz, 146
 Cochin-China, 154
 Cojimar, 71
 Colinet, 64
 Cologne, 93, 95
 Colombia, 79, 88, 89
 Colon, 218
 Constantinople, 74, 146
 Constanza, 74
 Cordova, 144
 Cornwall, 215
 Costa Rica, 88
 Cuba, 24, 40, 60, 91, 95

 Dakar, 74
 Delaware, 153
 Denmark, 119, 178
 Déolen, 194
 Dover, 20
 Dutch East Indies, 74, 145
 Dutch Harbor, 144
 Duxbury, 42, 98

 Ecuador, 79, 90, 97
 Emden, 73, 92, 93, 121, 217, 219
 England, 3, 4, 20, 49, 58, 154,
 169, 179, 180, 188, 194, 195,
 196, 217, 220, 221
 English Channel, 73
 Eureka, 144
 Europe, 23, 29, 47, 49, 60, 61,
 63, 64, 76, 91, 92, 93, 94, 95,
 96, 98, 108, 110, 121, 144,
 148, 156, 170, 174, 178

 Far East, 2, 149
 Fayal Island, 92, 219
 Fiji Islands, 145
 Florida, 40, 41, 60, 82
 France, 29, 49, 50, 51, 53, 56,
 57, 63, 70, 73, 74, 106, 118,
 119, 135, 154, 156, 179, 192,
 221, 224
 French Indo-China, 145
 Fuimicino, 216
 Funchal (Madera), 65, 195
 Funibashi, 145

 Germany, 34, 73, 74, 75, 91, 118,
 119, 154, 204
 Gibraltar, 65
 Glace Bay, 155
 Great Britain, 20, 29, 40, 43, 63,
 91, 92, 93, 114, 118, 121, 122,
 128, 129, 136, 137, 156, 186,
 187, 195, 196, 203, 224.
 Great Lakes, The, 144
 Greece, 175
 Greenland, 188
 Guam, 74, 95, 144, 202, 219
 Guatemala, 87, 88
 Guayaquil, 89

 Haiti, 25, 69
 Halifax, 24, 73, 198
 Harbin, 153
 Heart's Content, 63, 98, 109, 195
 Highland Lights, 139
 Holland, 119, 123, 154
 Hongkong, 155
 Honolulu, 95, 144, 145
 Horta, 92, 216

 Iceland, 188

- India, 154, 169
 Indo-China, 154
 Ireland, 4, 39, 91, 92, 220
 Island Cave, 64
 Italy, 119, 179, 204, 216, 217,
 224
 Iwaki, 145

 Japan, 41, 73, 74, 75, 144, 145,
 153
 Java, 154
 Jerusalem, 18
 Juneau, 144

 Ketchikan, 144
 Key West, 144
 Key West Harbor, 71
 Kodiak, 144
 Koetwyk, 154

 Le Havre, 115
 Liberia, 74
 Lima, 76, 96, 218
 Lisbon, 24, 64, 92, 122, 195, 216
 Loanda, 65
 London, 24, 30, 32, 91, 93, 94,
 122, 131, 154, 155, 169, 174,
 176, 177, 179, 187, 195, 205,
 221
 Long Island, 73, 74, 221
 Lorenzo Marquez, 65
 Louisburg, 99
 Luzon, 95

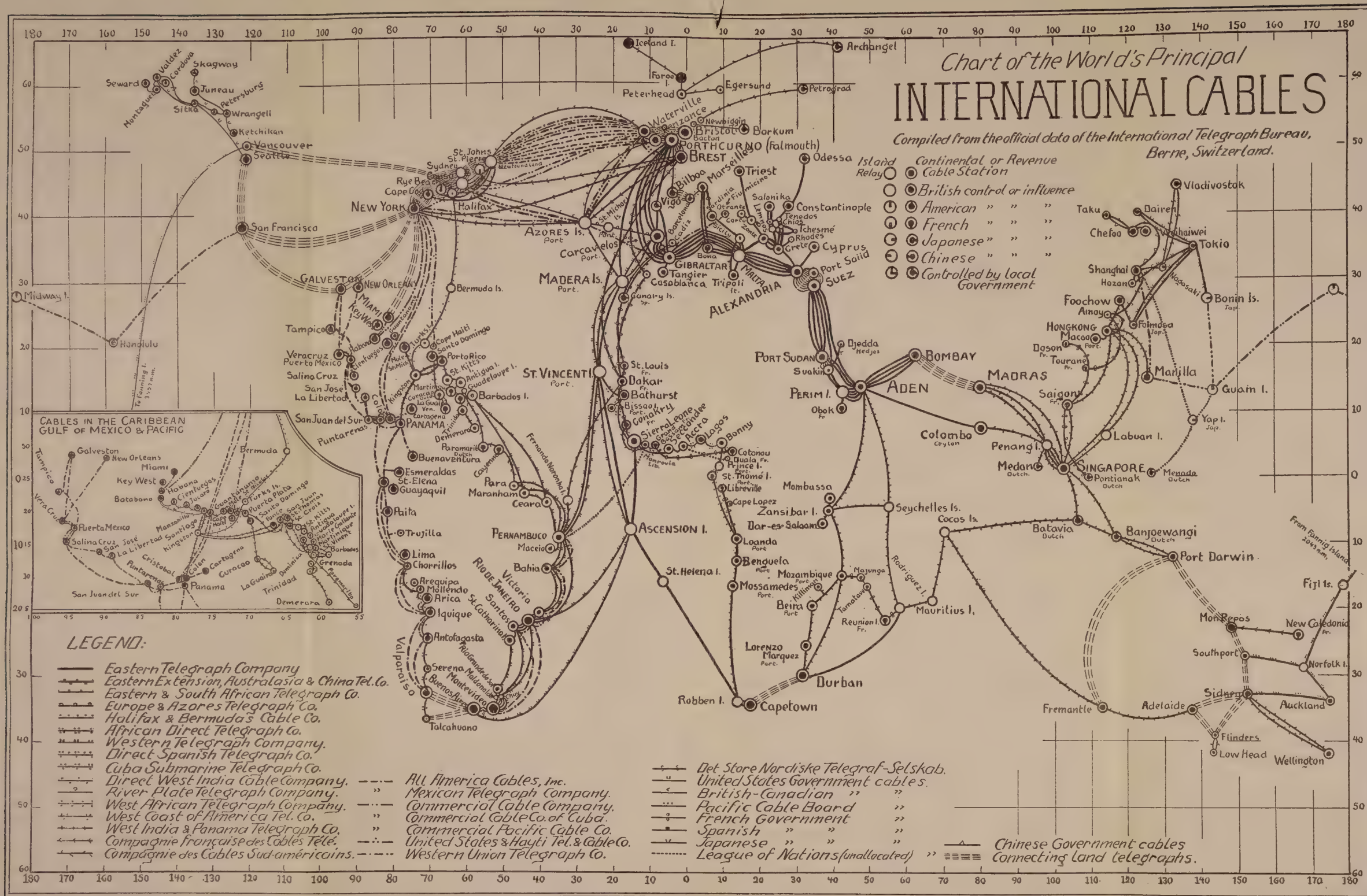
 Madera (Funchal), 65, 195
 Madrid, 179
 Malaga, 216
 Malobar, 154
 Manhattan Bay, 198
 Manila, 144, 145
 Mare Island, 144
 Marshfield, 144
 Mediterranean, 105
 Menado, 74
 Merizo, 145

 Mexico, 8, 24, 79, 85, 86, 87, 88,
 91
 Miami, 68, 69, 84, 105, 137
 Midway Island, 95
 Miquelon, 4, 64
 Montevideo, 132
 Morovia (Monrovia), 74
 Mossamedes, 65
 Mozambique, 65

 Nabu, 75
 Nairobi, 155
 Nantes, 154
 Nauen, 221
 Near East, 2
 Netherlands, The, 13, 156, 224
 Newfoundland, 4, 39, 65, 107,
 109, 119, 195
 New Orleans, 144
 New York, 47, 49, 51, 52, 58,
 73, 74, 92, 93, 94, 95, 99, 100,
 101, 114, 121, 122, 169, 179,
 180, 188, 196, 217, 218, 219
 New Zealand, 145, 169, 174
 Nicaragua, 79, 88, 89
 Norfolk, 144
 North Head, 144
 North Sidney, 98
 Norway, 123
 Nova Scotia, 4, 65, 119

 Paiti, 218
 Panama, 88, 89, 96
 Paris, 23, 24, 52, 53, 103, 146,
 177, 178, 180, 181, 192
 Payta, 89, 90
 Pearl Harbor, 144
 Peking, 144, 145, 153
 Pendant (Penzance), 73, 99, 109,
 198,
 Perth, 154
 Peru, 79, 90, 96
 Philippines, 24
 Pittsburg, 177
 Ponta Delgado, 92
 Poona, 154

- Porte au Basque, 64
- Port Darwin, 154
- Port Limon, 218
- Porto Rico, 67, 69, 144
- Portugal, 119, 195, 196, 216
- Prince Edward's Island, 4
- Puget Sound, 144, 145
- Puget Sound Navy Yard, 144
- Rio de Janeiro, 79, 82, 125, 128, 218
- Robert Bay, 64
- Rocky Point, 221
- Rome, 18, 24, 177, 179
- Rumania, 74
- Russia, 40, 156,
- Rye Beach, 47, 62, 99
- Saigon, 154, 222
- St. Asise, 221
- St. George, 144
- St. Johns, 63, 114
- St. Paul, 144, 145
- St. Pierre, 49, 52, 64, 98, 99
- St. Petersburg, 24, 25, 28, 29, 32, 33, 37, 54
- St. Thomas, 65, 69
- St. Vincent (Cape Verdi), 24
- Salcombe, 99
- Samoa, 144, 145
- San Diego, 144
- San Francisco, 144, 179
- San Salvador, 79, 90
- San Thiago, 24, 65
- Santos, 79, 218
- Sappoco, 145
- Sayeville, 144
- Scandinavia, 73, 179, 204
- Seward, 144
- Shanghai, 74, 75, 145, 153
- Singapore, 154, 155
- Sitka, 144
- Society Islands, 145
- South Africa, 8, 169, 174
- South America, 65, 67, 74, 80, 83, 95, 121, 123, 125, 140, 153, 176, 195, 196, 218
- Spain, 13, 119, 216, 217
- Switzerland, 13
- Sydney, 99
- Tampico, 85, 86
- Tatoosh, 144
- Torbey, 99
- Trujillo, 218
- Turkey, 175
- Tutilla, 145
- United States, The, 1, 2, 3, 4, 5, 8, 9, 14, 23, 24, 25, 29, 30, 33, 39, 41, 43, 44, 47, 48, 49, 50, 51, 52, 56, 60, 61, 62, 63, 64, 65, 66, 67, 71, 72, 73, 75, 76, 86, 87, 88, 89, 90, 91, 95, 97, 98, 100, 101, 102, 103, 105, 106, 114, 120, 121, 126, 128, 131, 134, 139, 143, 145, 146, 152, 154, 155, 167, 168, 169, 174, 177, 186, 190, 191, 193, 194, 195, 198, 202, 203, 204, 206, 208, 210, 216, 220, 221, 224
- Utica, 154
- Uruguay, 78, 79
- Valentia, 98, 109, 195
- Valparaiso, 79
- Venezuela, 155
- Vera Cruz, 85, 87
- Versailles, 219
- Victoria, 218
- Vienna, 23, 146
- Villa Real, 64
- Vladivostok, 145
- Washington, 53, 57, 59, 68, 97, 143, 145, 155, 169, 191, 192, 194, 197, 205
- Waterville, 114, 115
- West Indies, 65, 76
- Windhook, 155
- Yap, 74
- Yucatan, 87





HE7700.S3

Cables and wireless and their role in the



3 0629 0102292 2

HE
7700
53

